

CATHOLIC POLYTECHNIC UNIVERSITY

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Overview

Mission

The Mission of Catholic Polytechnic University is to advance the evangelical mission of the Catholic Church entrusted to her by Christ through the formation of scientists, engineers, and technology leaders with expertise in business, communications, and theology.

In doing so, Catholic Polytechnic University will raise the socioeconomic status of the disadvantaged, and help rebuild the Catholic Church.

Vision

The foundation of Catholic Polytechnic University is faithfully Catholic theology and apologetics, upon which each of the polytechnic careers is built, including: science, technology, engineering, and math. Further, business and communications courses are required curriculum.

Particular emphasis is placed on polytechnic careers in high demand. Double-majors, minors, and interdisciplinary degrees are encouraged. With Catholic Polytechnic's values-driven focus, students view their science and technology career expertise within the context of Catholicism.

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Science and Faith

For thousands of years, the Catholic Church has been at the forefront of science and technology. Catholic Polytechnic University was designed to resurrect and reaffirm the complementary relationships between faith and science – the Creator revealing Himself in His creation. By educating students in the fundamentals of faith and the latest advances in science and technology, Catholic Polytechnic ensures generations of young Catholics can continue to be faithful influencers in an increasingly technical and secular world. On this foundation, Catholic Polytechnic can provide the dissenting voice of truth to the overall suppression of religious expressions in technology centers worldwide.

Value Proposition

Catholic Polytechnic is a new Catholic institution of higher education that will focus on technology and science and the formation of Catholic students in their faith. Catholic Polytechnic is unique and different from other higher learning institutions in two ways:

First, Catholic Polytechnic was created to integrate faith and reason, being faithful to the Magisterium and principles of *Ex Corde Ecclesiae*, while embracing and furthering advances in science, engineering, and technology. Catholic Polytechnic students will be both leaders in high technology fields and also leaders in the Church, living the Good News of Jesus Christ in both the modern day culture, and the high technology/science workplace.

*Catholic Polytechnic aims to Glorify God through Science
and Technology.*

*Its motto is **Fides et Scientia**, Faith and Science.*

Second, central to Catholic Polytechnic's *raison d'être* is its commitment to provide an affordable and high quality science and engineering education. Because of this core principle, Catholic Polytechnic is designed to be accessible to all Catholics regardless of income and wealth status. To this end, we embrace the innate dignity and ability of the human person as taught by our Lord, Jesus Christ.

Current Status

Catholic Polytechnic has attracted significant interest nationally. Significantly, both Franciscan University at Steubenville and Benedictine College have proposed collaborations with Catholic Polytechnic. The university has secured initial donors, 501(c)(3) status, and an amazing team including former administrative staff from high-ranking Catholic colleges, several scientists and engineers from NASA, top Catholic theologians, and many potential professors. The Educando Foundation¹ has offered curriculum and collaboration for STEM teaching certificates. Many potential staff, students, and parents from across the nation have enquired as to when classes will begin.

¹ <https://educando.org/>

Ecclesiastical Approval

We recently met with Archbishop José Gomez. The concept of Catholic Polytechnic University was very well received. Catholic Polytechnic received His Eminence's blessing to move forward, and permission to use "Catholic" in the name. He has also promised a member of his staff will serve on the Catholic Polytechnic University Board of Directors to ensure adherence to Catholic teaching and direct collaboration with the Archdiocese of Los Angeles.



From left to right: Dr. Jacqueline Curiel, Dr. John Tran, Dr. Jennifer Nolan, Archbishop José Gomez, Pope Francis, Mrs. Heather Stefanini, Mr. Michael Stefanini, Msgr Albert Bahhuth, and Mr. Paul Escala.

Business

From a business point of view, it is of utmost importance to create a sustainable university to serve the Catholic community for years to come. In order to achieve this goal, administrative positions are kept at a minimum, expensive sports programs avoided, and other cost-saving measures are employed. The cost-savings will allow Catholic Polytechnic to first, keep tuition low and thus affordable for most families; second, to put more money into hiring the best teachers in their respective fields; and third, to flourish as a business for years to come.

...keep tuition low and affordable for families...

Furthermore, grants for tuition support for students in need and ongoing private grants will supplement cash flow from tuition income. Catholic Polytechnic will not participate in Federal Student Financial Aid

programs, thereby allowing Catholic Polytechnic to operate fully within our Catholic values. Degree programs will be streamlined, making graduation in three years possible. By offering a summer semester, tuition income is generated year-round. The founders of Catholic Polytechnic strive to make scholarships available to those in need, which is in line with our mission to make STEM degrees accessible to Catholics.

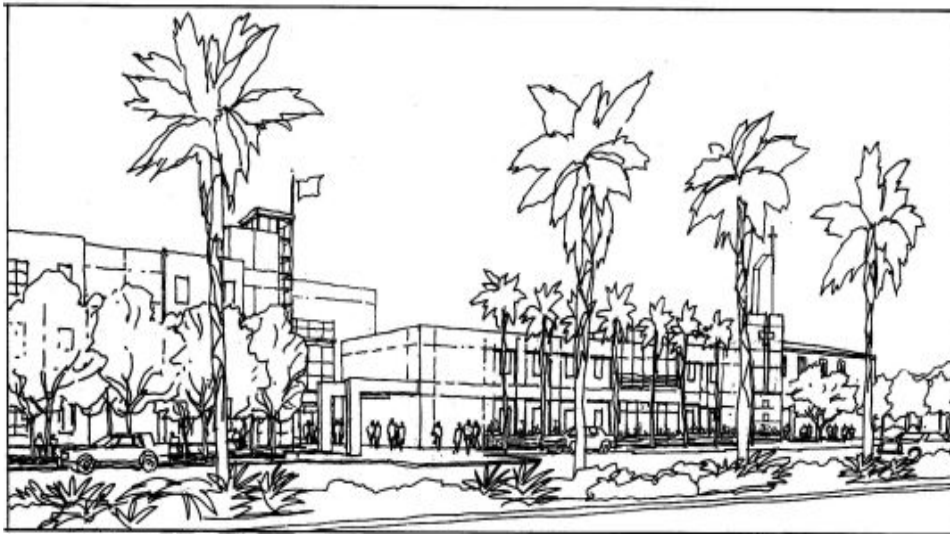
Campus Plan

While initial course offerings will likely be online graduate programs aimed at professionals, the vision of Catholic Polytechnic University includes a brick-and-mortar campus in or near the greater Pasadena area for both undergraduate and graduate degrees.

Catholic Polytechnic University is exploring two options for its physical campus:

- New facilities offer a customized environment that is tailored to the founder's vision.
- Pre-existing facilities allow for immediate use.

In both cases the chapel will be an integral part of the campus. Throughout, sacramentals and Catholic art will be prominently displayed conveying devotion to our Lord. Ideally, a 24/7 Adoration chapel will be at the center of campus, and the Mass chapel will be an integral part of the campus.





HCA Partners, Inc. designed some notional campus concepts for Catholic Polytechnic. However, our preference is to use pre-existing buildings in the greater Pasadena area.

Since maintaining campus buildings is usually costly, expensive university components such as health centers, building maintenance, and recreation centers will be outsourced. Unutilized campus space will be rented for income, particularly during the off hours. The academic library will be largely digital, saving space, utilities, expensive subscriptions, and man hours. Finally, if buildings are owned, a portion of these buildings will be rented out to outside businesses (e.g., a market, a coffee stand, a restaurant) to provide additional income while serving the needs of the Catholic Polytechnic community.

Faculty and Staff

Professors will be chosen by their teaching capabilities, Catholic orthodoxy, field expertise, and career accomplishments. Although they will have the freedom to apply for research grants and to maintain expertise in their fields, professors will not be required to publish or patent; their primary focus will be on teaching. Rather than tenure, long-term contracts will be utilized, allowing flexibility in course offerings and ensuring fidelity to Church teaching. Lower division courses and courses in Catholic theology are taught by experts with Master's and Ph.D.'s. Courses in each of the polytechnic degree paths are taught by noted experts in their respective fields.



All faculty and staff will take the Oath of Fidelity to the Magisterium of the Catholic Church as designated by The Cardinal Newman Society.

Religious Formation

Evangelization and catechism will be of utmost importance at Catholic Polytechnic University. At least one member of a religious order or diocesan Catholic priest will be on campus. Masses are offered daily in a chapel, and sacraments are readily available. Required courses in Catholic theology include but are not limited to: doctrine, Catechism, theology, and apologetics. Conduct by all participants, including students, faculty, and staff, is guided by the Ten Commandments and Catholic teaching. With a climate of Catholic immersion, each graduate will be both grounded in true Catholic theology and a trained defender of the Faith.

*Evangelization and catechism will be of utmost importance
at Catholic Polytechnic University.*

Success Defined

Catholic Polytechnic will employ success metrics twofold. First, success will be defined specific to a Catholic teaching institution, such as active membership and participation in the Catholic Church. Secondly, Catholic Polytechnic will closely track the number of graduating students who obtain high paying jobs in their respective STEM/Business industries.

Initially, success will be defined based on enrollment. After the first few years, Catholic Polytechnic should achieve accreditation, and will engage the five most commonly seen metrics used in student success in higher education:

- Retention rates
- Graduation rates
- Time to completion
- Academic performance
- Tracking educational goals

Metrics will be tracked over time, and then improved through means of student engagement, teaching evaluations, career job placement, and enrollment strategies.

End Goals

The end product will be strong Catholics who can articulate and defend their faith, who are experts and experienced in their chosen polytechnic career paths, and who have working knowledge of business and communications practices. Strong ties to the science, engineering, and technology business sector provide both internships and apprenticeships in their respective fields, and a high rate of post-graduate job placement.

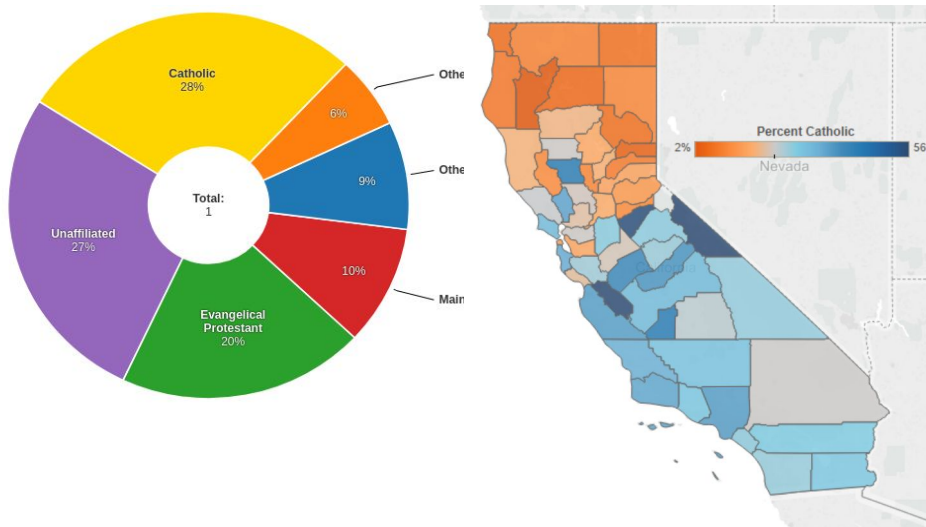
*The end product will be strong Catholics who can articulate
and defend their faith.*

Similar to the Apostles speaking in tongues and going out into the world to preach the Gospel, Catholic Polytechnic students would go out as Catholic missionaries to the business, science, and technology sector, speaking in science and tech “languages,” preaching the Gospel to the world.

Serving Los Angeles and all of Southern California

Fertile Landscape of Catholicism

The immediate population served includes the 8.5 million Catholics in the Los Angeles (4.4M), Orange (1.5M), San Bernardino (1.6M) and San Diego (1M) counties. Within the Archdiocese of L.A., there are 51 high schools which educate 27,000 students². At very conservative estimates, if Catholic Polytechnic educated only 2% of these students, 540 students per year would attend the university.



According to the Pew Research Center, Catholicism is the largest religious tradition in California. Southern California has a strong Catholic population.

Source: Sacramento Bee and Pew Research Center

Ultimately, Catholic Polytechnic University will serve the 72 million Catholics in the United States and even North America. Indeed this is an ambitious goal, but with the Lord's blessing, Catholic Polytechnic will succeed in accomplishing this service.

² <https://catholiced.com/school-search/>

Economically Disadvantaged

Catholic Polytechnic University serves the economically disadvantaged population on multiple fronts, although two stand out in particular:

According to the United States Census Bureau, approximately half of the Los Angeles county residents are Hispanic or Latino³ and of these, 14% live in poverty. The United States Conference of Catholic Bishops states that “the Hispanic population of Los Angeles County, California, was the highest of any county: 4.7 million”⁴. By offering an opportunity for improved economic position through a technical career in the context of a Catholic education, Catholic Polytechnic fulfills our Lord’s desire: reaching out to the disenfranchised and marginalized.

Homeschooled students compose an additional target, as there are roughly 25 networks of Catholic homeschoolers in Southern California⁵ and an estimated 200,000 homeschooled children in CA⁶. In general, homeschooled numbers have increased during economic downturns⁷. It is theorized that many families can no longer afford private schools, and so turn to homeschooling. These students are often devout Catholics and seek exactly the curriculum that Catholic Polytechnic offers. Our hope is to provide tutoring, materials, and support that will lead this community to Catholic higher education, ultimately providing them with STEM degrees.

*Catholic Polytechnic fulfills of our Lord’s desire: reaching out
to the disenfranchised and marginalized.*

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<https://www.census.gov/quickfacts/fact/table/losangelescountycalifornia/RHI725218>

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<http://www.usccb.org/issues-and-action/cultural-diversity/hispanic-latino/demographics/hispanic-latino-demographics.cfm>

⁵ <http://www.catholichomeschool.org/findgroupresults.php>

⁶

https://a2zhomeschooling.com/thoughts_opinions_home_school/numbers_homeschooled_students/

⁷ <https://www.nheri.org/homeschool-population-size-growing/>

High Tech Surroundings

Southern California is home to many high tech companies. Catholic Polytechnic will work closely with many of these organizations to facilitate internship opportunities and develop a well-paying career path for our students, thereby providing the graduates and their families a higher socioeconomic status for a lifetime.



Additionally, seeking out and connecting students with paid internships will ensure that this college education is a minimal burden on the students' Catholic families.

Evangelization

Evangelization through Education

Evangelization, though not a formal course, is a part of the Catholic Polytechnic way of life. In particular, we are faithful and proud Catholics, and desire to share that love of our faith with others.

Catholic Polytechnic faculty and students will become witnesses to the community. Our graduates are expected to represent the Catholic faith with reverence and dignity. Our instructors are expected to teach the deposit of faith through their actions, both inside and out of the classroom.

This university will provide an environment for doing science and math without the reprisal for showing our love for the Lord, a feature unique to the Catholic Polytechnic setting. For example, one scientist/professor from a local university called to say that he had been pressured for 18 years to do embryonic stem cell research, and he wanted to bring his labs to Catholic Polytechnic University to do stem cell research without pressure to use aborted fetal tissue. Other scientists have expressed similar desires.

Another area of evangelization is in teaching ethics for the use in industry. Healthcare, science, technology, and business all require ethical influences, and it is our mission to educate professionals on the topic of ethics pertaining to those fields.

This university would provide an environment for doing science and math without the reprisal for showing our love for the Lord.

On college campuses across the nation, college students are falling away from their faith. Statistics show that just 12% of Catholics aged 21-29 identify as Catholic⁸. This demographic is ripe for the New Evangelization, and this is where Catholic Polytechnic University will be particularly effective. Through education in Catholic theology, apologetics, sacraments, and immersion in Catholic culture, Catholic

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<https://news.gallup.com/poll/232226/church-attendance-among-catholics-resumes-downward-slide.aspx>

Polytechnic students will not only deepen their faith, but then be able to evangelize both Christian communities and *Mission ad gentes*.

Evangelization through Community Outreach

The Catholic Polytechnic graduates will be able to start teaching or tutoring math and science in Catholic schools, especially in the inner-city poorer Catholic communities, to plant the earliest possible seeds for Catholic-Science connections.

Drone research pays off for SMA junior



A St. Monica Academy junior was the recipient of the 2019 Environmental Justice Angel Award at the East Los Angeles Community Youth Center's (ELACYC) 15th Annual Gala last month at Cal State University Los Angeles.

Steven Conaway was recognized for his ongoing work in designing a system to measure the air quality using drone technology to detect and analyze levels of carbon monoxide, ozone, hydrogen sulfide, nitric oxide, and volatile organic compounds at various locations within East Los Angeles.

"Steven's impressive work on this project to create a platform to fly sensors on the drone and then measure and analyze the data made him an ideal candidate for this environmental award," said Michael Murray, ELACYC board treasurer.

The center's youngest award recipient, Conaway has worked as a tech instructor at the ELACYC teaching elementary and middle-school students about robotics and drones. He says he's considering pursuing Computer Science and Electrical Engineering in college.

"I know that our Lord will place me exactly where I'm supposed to be because we are all created for his purpose. I just hope I can serve him well," said Conaway. ♦

Steven Conaway with his parents after receiving the Environmental Justice Angel Award along with a Certificate of Recognition from Assemblywoman Wendy Carrillo and LA County Supervisor Hilda L. Solis.

CPU's faculty and researchers are instrumental in promoting Science and Engineering amongst Catholics. In fact, Dr. Tran (not pictured) is a co-PI for the ELACYC'S Drone air quality project (Source: Angelus News). Roughly 50% of St. Monica Academy graduates ultimately seek STEM degrees, yet there is no university in Los Angeles that is fully equipped to serve both their Catholic and STEM degree needs.

If Catholic Polytechnic partners with Educando, it could offer STEM teaching certificates online to diocesan school teachers, thereby giving them the tools to teach STEM in a variety of communities. Also, Catholic Polytechnic students can volunteer tutoring time to local high schools.

Timeline

With support from the Porticus Foundation, we will be able to fill this needed gap in the Catholic education system in the US and abroad while carrying out the following goals in the next five years:

YEAR ONE: Establish the university in 2020 by first securing grants, identifying a university campus, recruiting a highly skilled

administration and faculty, and initiating a five-year academic and strategic plan for the University. In Fall 2020, launch initial online courses and certificates aimed at professionals, in cyber security and STEM Ethics. Obtain approval to operate as a degree-granting licensed institution from the California Bureau for Private Postsecondary Education.

YEAR TWO: In Fall 2021, enroll its first undergraduate cohort of 50 new students with a retention rate of at least 80% and establishing both paid and university credit-based intern relationships with at least four local companies to help with retention rates. Take initial steps to earn accreditation.

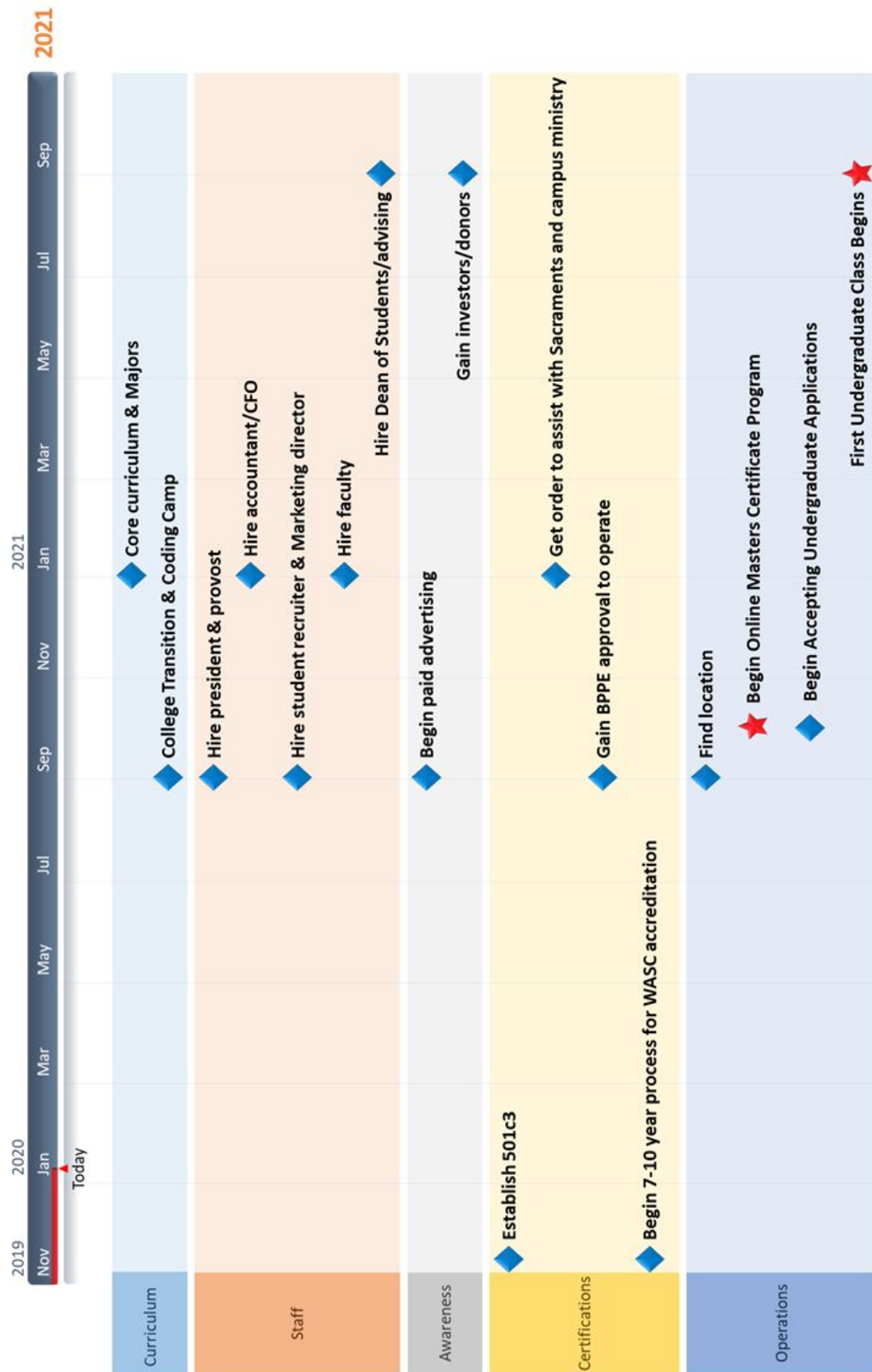
YEAR THREE: Enroll 110 total students with a retention rate of at least 82%; and establish both paid and college-credit based internship relationships with 6 additional companies.

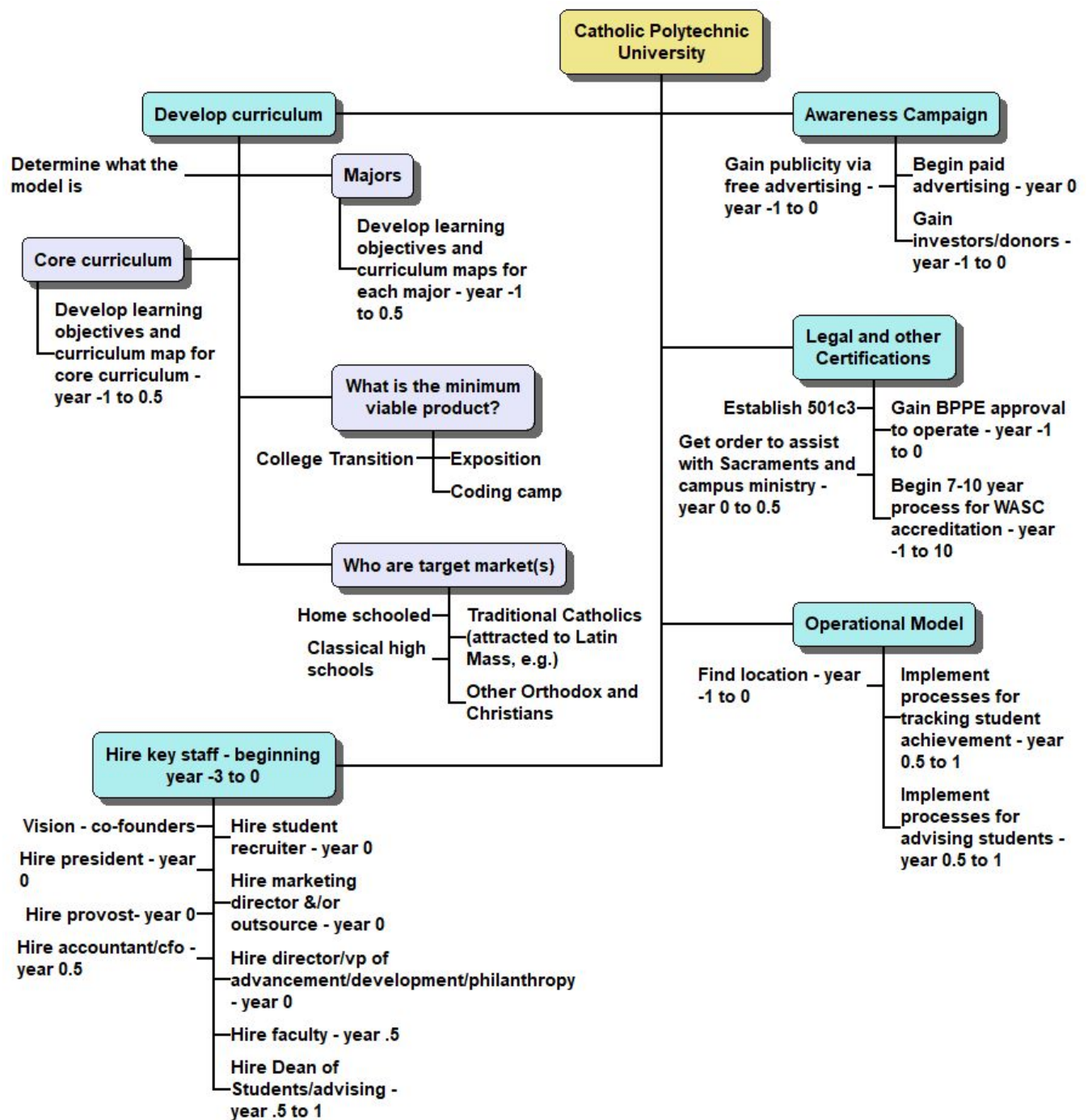
YEAR FOUR: Enroll 150 total students with a retention rate of at least 84% and establish both paid and college-credit based intern relationships with 8 companies.

YEAR FIVE: Enroll 200 students, graduate at least 30 students in its first graduating class, place 95% of graduates in science and technology careers, and retain at least 85% of existing student body through establishing both paid and college-credit based intern relationships with at least 10 companies locally in Southern California and abroad for summer internship programs.

With guidance by our dedicated Founding Board and Staff, the first two years of Catholic Polytechnic University's operations will consist of close adherence to our founding strategic plan. Years 2020 and 2021 will consist of first assembling our administrative team and faculty during which decided focus will be upon establishing the modes of instruction, formulating a world-class curriculum, beginning the application for national accreditation, and establishing processes and procedures while refining them as needed to ensure optimized operations and student engagement. To do so, our founding faculty and administrative members will employ best practices for pedagogy and efficient administration.

Timeline and Roadmap





SWOT Analysis of Catholic Polytechnic University

STRENGTHS

- Strong, faithful Catholic identity and faith formation.
- Low competition: No other university exists in the US with the sole purpose of combining Catholic faith and science.
- Backed by Archbishop Gomez and the Archdiocese of L.A., with permission to use "Catholic" in the name, and a member from his staff on the CPU Board.
- Innovative programs in STEM, Business, and faith (e.g., STEM Ethics certificate).
- The name elicits instant appeal and understanding.
- Exceptionally accomplished and passionate STEM, business, & theology professors.
- Prime location for relationships with businesses and large Catholic population.

WEAKNESSES

- Start-up with uncertain future.
- Nonexistent branding.
- May require overhead funding for building maintenance.
- No established track record or reputation.
- Unestablished accreditation at the start.

OPPORTUNITIES

- Huge unmet need for booming college enrollment in CA; ~100k seats short by 2030.
- Filling a void in STEM/Faith degrees.
- Large Catholic homeschool population (approx. 200,000 in CA).
- Large Catholic high school population nearby (26 Catholic high schools with 14,000 students in the Archdiocese of Los Angeles).
- A plethora of Catholic STEM professionals who want to teach at CPU.
- Foundations, benefactors, parents, STEM professionals instantly understand and support the vision.
- Other nearby Catholic colleges losing their Catholic identity.

THREATS

- Excellent secular universities nearby (e.g., UCLA) offering STEM degrees.
- Declining population of Catholics nationwide.
- Perceived disconnect between faith and science.
- Perception of Catholic university as cost-prohibitive.

Projected Financials

Projected Budget					
Academic Year	2020-21	2021-22	2022-23	2023-24	2024-25
Number of students (annual weighted average)	0	47.5	97.0	151.2	204.1
Tuition and fees per student (annual)	\$0	\$7,500	\$7,500	\$7,500	\$7,500
Income:	\$0	\$356,250	\$727,719	\$1,134,015	\$1,530,908
Less institutional aid (10% calculated)	\$0	-\$35,625	-\$72,772	-\$113,401	-\$153,091
Federal and state grants	\$0	\$0	\$0	\$0	\$0
Private gifts and grants	\$1,000,000	\$3,000,000	\$4,000,000	\$5,000,000	\$5,000,000
Auxiliary enterprises (rental or other income)	\$0	\$50,000	\$50,000	\$50,000	\$50,000
Interest and dividends	\$0	\$5,000	\$5,000	\$5,000	\$5,000
Other	\$0	\$5,000	\$5,000	\$5,000	\$5,000
Total revenues and investment income	\$1,000,000	\$3,380,625	\$4,714,947	\$6,080,613	\$6,437,817
Expenses:					
Instruction (if only adjunct professors are used)	\$0	\$142,500	\$291,088	\$453,606	\$612,363
Administration, instructional, finance, legal:	\$347,625	\$540,000	\$540,000	\$641,250	\$641,250
Student services	\$84,375	\$84,375	\$84,375	\$84,375	\$84,375
Campus operations and maintenance personnel	\$0	\$47,250	\$148,500	\$148,500	\$148,500
Campus operations and maintenance (facilities)	\$50,000	\$100,000	\$150,000	\$200,000	\$250,000
Marketing & recruitment personnel	\$101,250	\$101,250	\$101,250	\$101,250	\$101,250
Paid advertising	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Information Technology personnel	\$84,375	\$168,750	\$168,750	\$168,750	\$168,750
Information Technology equipment	\$20,000	\$100,000	\$100,000	\$100,000	\$100,000
Library subscriptions	\$0	\$20,000	\$40,000	\$60,000	\$80,000
Librarian	\$25,313	\$50,625	\$50,625	\$50,625	\$50,625
Depreciation and amortization	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Rent / Mortgage	\$0	\$572,904	\$572,904	\$572,904	\$572,904
Utilities	\$20,000	\$75,000	\$77,000	\$79,000	\$81,000
Office supplies and services	\$10,000	\$25,000	\$30,000	\$35,000	\$40,000
Other - contingencies	\$40,000	\$200,000	\$300,000	\$400,000	\$450,000
Total expenses	\$947,938	\$2,392,654	\$2,819,492	\$3,260,260	\$3,546,017
actual cost per student	\$0	\$50,372	\$29,058	\$21,562	\$17,372
Net assets at end of year	\$52,063	\$987,971	\$1,895,455	\$2,820,353	\$2,891,800

Conclusion

With support from the Porticus Foundation, Catholic Polytechnic University can help fill the need for a Catholic education that is anchored in the highest level of STEM learning and grounded in faith and Catechism. As such, we seek to improve the standard of living of generations of Catholics through educating innovators and leaders in the fields of science and technology who will contribute to their communities, industries and their Catholic parishes. We aim to recruit talented students at both the national and international level with a strong focus on attracting high school students from Southern California to attend our four-year university, and to provide our alumni with career advancement, positioning them to become leaders in the science, engineering and technology sectors.

In addition to carrying out this dual focus of creating a future workforce that is steeped in the Catholic faith and leading academics in STEM, Catholic Polytechnic University will instill in its scholars a strong understanding and commitment to the faith---to help students develop a deep personal relationship with Jesus Christ and his mother Mary, particularly with devotion to Our Lady of Guadalupe, patroness of the Americas, while also providing a world-class, hands on education in science and technology.

Catholic Polytechnic University is the only university of its kind in the Americas that combines this intensive encounter with faith and immersion in science, engineering, business, and high technology.

Founders

Jennifer Nolan, Ph.D.

President and Co-Founder, Cognitive Scientist

Dr. Nolan holds a Ph.D. in Psychology from the Dept. of Cognitive Science at the University of California, Irvine (UCI) with specialization in memory, dementia, stroke, brain plasticity and diabetes. She is a neuropsychologist, memory specialist, psychometrist, and certified Cogmed provider. Previously, she was the C.O.O. and co-founder of a state-of-the-art stroke and brain injury rehabilitation center. Dr. Nolan has taught university courses at UCI, Loyola Marymount University, and Glendale Community College, including Gerontology, Research Methods, Statistics, General Psychology, English Composition, and Psychophysiology. She has conducted local and nationwide clinical trials, and published in both scientific journals and popular magazines.



Christopher Plance

Co-Founder, Theologian

Mr. Plance is a co-Founder of CPU and has an undergraduate degree in Kinesiology from Westmont College and an M.A. in Theology from Franciscan University. He has worked as the Director of Evangelization for St. John Paul the Great Catholic University in Escondido, CA. He was an essential part of their accreditation process and is familiar with the steps necessary for WASC approval. He has taught theology and history at Catholic high schools for four years, and is a regular public speaker on topics of Catholic theology.



Core Team Members

Jacqueline Curiel, Ph.D

Principal at Behavioral Cognition, LLC

At Behavioral Cognition, LLC, Dr. Curiel has conducted research in the area of cognitive psychology. She holds an M.A. and Ph.D. from the University of Notre Dame where her dissertation work focused on memory and narrative comprehension. She has taught cognitive psychology and statistics courses at the University of Texas at San Antonio and at Notre Dame. She has published articles in scientific journals and peer-reviewed conferences, primarily focusing on the structure of mental maps and situation models, age-related differences in memory, and situation awareness. A lifelong Catholic from Southern California, she is the mother to a mathematically inclined son who is receiving a Classical education.



Peter McNally

Senior Consultant at the User Experience Center, Bentley University

Mr. McNally is a Senior Consultant at the User Experience Center at Bentley University. He has extensive experience in usability, information architecture, accessibility, and software engineering. His current areas of interests include the intersection of user experience (UX) and customer experience (CX), universal design, artificial intelligence (AI), and internet of things (IoT). Regardless of the area or technology, Pete always focuses on the human at the end of the product, so they can have the most seamless and engaging experience. He has worked with users and designed digital experiences in the financial services, healthcare, government, education, energy, manufacturing, defense, and electronics industries.

Pete holds a Bachelor of Science in Computer Science from Northeastern University and a Master of Science in Computer Science from Rensselaer Polytechnic Institute (RPI). He is a member of the International User Experience Professionals' Association (UXPA), the Association of Computing Machinery (ACM), and the International Association of Accessibility Professionals (IAAP).

Pete and his wife Ellen live in the Boston area and homeschool their daughters.



James Monaghan, Ed.D.

University Provost

Dr. Monaghan is a collaborative, transformative leader with over 20 years experience in higher education as a chief academic officer, provost, accreditation liaison officer, associate provost of online education, assistant vice president for academic technologies and distributed learning, assistant dean of business, and as a tenured faculty member.

In over twenty years in higher education he has increased enrollment, expanded academic programs, strengthened shared governance, and ensured advancement of the Catholic mission as provost at John Paul the Great University, associate provost at The Catholic University of America and assistant vice president and tenured faculty member at California State University, San Bernardino.

In these roles, Dr. Monaghan led organizational change that enabled successful initial accreditation for fledgling university, and secured, managed, or co-managed over \$8 Million in grants and contracts. He has also accomplished successful major philanthropic efforts. He was responsible for dramatic increase in adoption of online and blended online courses and degree programs, growing from 0 to 11 accredited online programs, and initiated and managed the development of new university-wide initiatives in online learning leading to substantially improved revenue margins. He has chaired numerous state-wide higher education committees and has served on the planning committees of several national academic conferences.

As provost of John Paul the Great University, he catalyzed a university-wide culture of decision making based on data collection and analysis. He implemented rigorous curricular program review with external review for academic programs, spearheaded the development of online & distributed learning initiatives at Cal State, and has published research on the impact of computer assisted learning on students' cognition, distance learning strategies and higher education management.



Michael Stefanini

Senior Engineer for Caltech at NASA's Jet Propulsion Laboratory

Mr. Stefanini is a leader of the JPL IT Development and Project Management Office, managed JPL's Cloud Computing services, and is currently the Chief Engineer for Digital Transformation. He holds a Master's degree in Electrical and Computer and Systems Engineering. He has designed and implemented enterprise engineering and IT systems and has been involved with spacecraft engineering, process definition, and IT delivery for over 25 years.

He has received numerous accolades including the several NASA Honor Awards, the JPL Explorer Award, and the NASA Exceptional Achievement Medal for improvements to software development processes. Mr. Stefanini has lectured at many venues including the Project Management Institute, Gartner Conferences, MIT, NASA summits, and at the United Nations.



Heather Stefanini

Electronic Fabrication Manufacturing Lead for NASA's Jet Propulsion Laboratory at Caltech

Mrs. Stefanini has built three Mars Rovers and numerous other spacecraft. She was also a member of the operations team that navigated the Cassini spacecraft around Saturn and landed the Huygens probe on Saturn's moon, Titan. She is currently building the Europa Clipper Spacecraft which will orbit Jupiter and map the icy surface of Jupiter's moon, Europa. Heather has a Bachelor of Science in Mechanical Engineering from Rensselaer Polytechnic Institute. Heather is married with two young children. She converted to Catholicism in 2004, loves her Catholic faith and provides her children with a Classical education at a Catholic academy.



Lt. Col. John Tran, Ph.D.

Enterprise Senior Advisor at the Southern California Edison Company

Dr. Tran holds a Ph.D. in Computer Science from the University of Southern California and his thesis focused on combinatoric algorithms using adiabatic quantum annealing optimization. He has over 20 years of work experience spanning across multiple scientific and engineering domains. As a computer scientist at the Stanford Linear Accelerator Center, Information Sciences Institute, and the Jet Propulsion Laboratory, he conducted research in high performance computing and optimization algorithms for large-scale data processing systems which has been published in peer-reviewed journals and conferences.

Currently, he is an enterprise senior advisor at the Southern California Edison company, where he is tasked with developing the short and long term cybersecurity strategy to protect the Edison enterprise and the electric grid networks.

He has taught at Santa Clara University and the California State University and served as thesis advisor to numerous students.

Holding the rank of Lieutenant Colonel, he currently serves as a member of the California Air National Guard. His military operational and technical expertise centers around cybersecurity,. He served on multiple deployments, including a combat tour in Kirkuk, Iraq where he worked tirelessly on numerous peacekeeping and provincial reconstruction missions. For his exemplary service, he has received multiple distinguished service citations, such as the Meritorious Service Medal and Operation Iraqi Freedom Medal.



Advisory Board Members

Anthony Beata

Vice President for Finance, CFO at Hastings College

Anthony is an experienced Higher Education professional with over 30 years of success as a CFO, Public Accountant, Controller, Business Operations Manager, Business Owner, and Financial Manager in university, private, and public practice.

He is currently the CFO of Hastings College, in Hastings Nebraska, a private, faith-based college established in 1882, which is currently reimagining itself as it introduces several initiatives to ensure every student can succeed, both academically and in their lives after graduation. Previous to joining Hastings College, he was the Controller at Ave Maria University located in Southwest Florida for 9 years, heading up their accounting and finance office during their critical and extraordinary growth as a new Catholic university. During his tenure, Ave Maria transitioned from a fledgling startup with 150 undergraduate students located in a temporary campus, to one that achieved its first regional accreditation, the expansion of academic programs from 10 majors to over 30, the introduction of intercollegiate athletics, and settled into a new permanent campus with approximately 1,000 undergraduate students.

Prior to joining Ave Maria, Mr. Beata served as the Director of Administrative Services and Stewardship at Saint Eugene Parish in Fox Point WI, having decided after 15 years to leave a successful partnership in his Hinsdale, Illinois, CPA firm in order to better align his career and personal vocation to serve the Church.



David Costanzo

Director of Philanthropy at Christendom College, Leadership Coach and Mentor, Nonprofit Consultant

David's most recent leadership experience includes 12 years serving benefactors of higher education organizations and more than 7 years serving MEFV related to vocations fundraising to overcome college debt obstacles. He has directly assisted benefactors in gifting more than \$22 million dollars in service to the Church and her apostolates. He possesses a diverse understanding of all levels of fundraising for non-profit, higher ed organizations (acquisition, direct mail, digital



marketing, crowdfunding, capital campaigns [silent and public phases] and planned-giving).

David's expertise also includes leadership development and management, organizational strategic planning and deployment, commercial properties management, retail and business banking, wealth management, all media marketing, and event management for up to 3000 attendees.

With a heart for the faithful Roman Catholic Church, David is a proven strategist for Catholic nonprofits. He tirelessly gives back through pro-bono coaching and mentoring to non-profit presidents, VP's, board members, and fellow development/fundraising professionals. He also serves as an advisor to the board of Catholic Polytechnic University and a board member serving House of Mercy.

Edward Feser, Ph.D.

Professor of Philosophy at Pasadena City College in Pasadena, California

Edward Feser has been a Visiting Assistant Professor at Loyola Marymount University in Los Angeles and a Visiting Scholar at the Social Philosophy and Policy Center at Bowling Green State University in Bowling Green, Ohio. He holds a Ph.D. in philosophy from the University of California at Santa Barbara, an M.A. in religion from the Claremont Graduate School, and a B.A. in philosophy and religious studies from the California State University at Fullerton.



Called by *National Review* "one of the best contemporary writers on philosophy," Feser is the author of many books and academic articles. His primary academic research interests are in metaphysics, natural theology, the philosophy of mind, and moral and political philosophy. Feser also writes on politics and culture, from a conservative point of view; and on religion, from a traditional Roman Catholic perspective. In this connection, his work has appeared in such publications as *The American*, *The American Conservative*, *Catholic Herald*, *Catholic World Report*, *City Journal*, *The Claremont Review of Books*, *Crisis*, *First Things*, *Liberty*, *National Review*, *New Oxford Review*, *Public Discourse*, *Reason*, *TCS Daily*, and the *Times Literary Supplement*. He lives in Los Angeles with his wife and six children.

Daniel Kuebler, Ph.D.

Dean, School of Natural and Applied Sciences at Franciscan University of Steubenville

Experienced Higher Education professional with a demonstrated history of academic leadership, scholarship, teaching, and research. Involved in clinical research, product development, and consulting projects with a variety of biotechnology firms in the regenerative medicine field. Speaker and author on topics related to Faith and Science, particularly from a Catholic perspective. Strong education professional with a Doctor of Philosophy (Ph.D.) focused in Molecular Biology from University of California, Berkeley and an undergraduate degree in English from the Catholic University of America.



Tariq Marji, MBA

Executive Director Cal State LA University Auxiliary Services, Inc.

Experienced Executive Director with a demonstrated history of working in the education management industry. Skilled in Generally Accepted Accounting Principles (GAAP), Statutory Accounting, Management Information Systems (MIS), Auditing, and Finance. Strong business development professional with a M.B.A. focused in Business Administration from Woodbury University.



Theresa Brennan Marji, JD

Chief Operating Officer of the Right to Life League of Southern California

Ms. Brennan serves as the Chief Operating Officer of the Right to Life League of Southern California and is responsible for program development and the overall operations of the organization. Her experience and leadership focuses on technology based pro-life outreach.

Ms. Brennan received a Bachelor of Arts in English Literature from UC Irvine, and a Juris Doctorate from Loyola Law School, Los Angeles. In addition to her legal experience in the areas of corporate litigation and estate planning, she has served as Assistant Director of Administration for Legal Aid Society of Orange County, providing strategic planning and administrative leadership for their operations throughout Southern California.



Joachim Ostermann, OFM, Ph.D.

Franciscan Friar and scientist

Fr. Joachim Ostermann is a Franciscan Friar, a scientist, and a person very much interested in everything that shows how science and Christian faith support each other. Prior to entering religious life, he earned a PhD in Biochemistry and worked at universities and biotechnology companies in the US and Canada. The larger theme of his ministry is to show how the Christian message has the power to transform our scientific-technological culture. His story is not about turning away from this past, but rather about how his scientific worldview was transformed by the experience of learning to be a friar, in the spirit of St. Francis. In one way or the other, Fr. Ostermann's blog posts are always about this: What can we learn when we take the Franciscan view of the accomplishments of science?



Ondy Sweetman

Grantwriter/Fundraising Consultant

Ondy Sweetman is an arts-focused fundraising consultant with over a decade of experience working with over 25 nonprofits across sectors working in the realm of contemporary, art, education, community service, social justice and the environment. She has raised \$50 million – and counting – for arts-based nonprofits from government, corporate, and private entities. Her talent is working with Boards and Staff to streamline operations, implement organizational strategies for short and long-term growth, and diversify income streams.

Ms. Sweetman has helped raise nearly \$50M for art organizations, such as LACMA and Prospect New Orleans, an international contemporary art biennial focused on environmental issues, sustainable development, as well as socio-political, cultural and economic issues in the US and the world. She also worked with a Sustainable Development nonprofit based in Brazil.



Nora Urrea, MBA

Administrator at Soledad Eye Surgeons Medical Group

Experienced Administrator with a demonstrated history of working in the medical practice industry. Skilled in Managed Care Health Care delivery systems, Nonprofit Organizations, Public Speaking, Fundraising. Strong information technology professional with a MBA.



Board of Directors

Robert Buchanan, MD

Chief of Neurosurgery at Ascension Seton and Seton Brain and Spine Institute

Dr. Buchanan is both a neurosurgeon and psychiatrist. He lives in Austin with his wife and son. He was appointed by Pope Benedict to serve on the Vatican's International Bioethics Committee (IBC) called the Pontifical Academy for Life. He is an associate professor at UT.



TBD, Staff Member of the Archdiocese of Los Angeles

Upon the request of Dr. Nolan and the CPU Team, Archbishop Jose Gomez promised to give Catholic Polytechnic University a member of his staff to be on the Board of Directors in order to always maintain compliance with the Archdiocese and Catholic Magisterium.

