LUMIERE EDUCATION

POSITIONING RESEARCH IN COLLEGE APPLICATIONS

Evidence from the 2024 College Admissions Cycle

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ABSTRACT

In this report, **we analyze data from 529 students who participated in the Lumiere Research Scholar Program on their admissions results.** In particular, we compare Lumiere students to the general admission pool and **find that students who did research were almost twice as likely than the general pool to be accepted into a top university[1].** For example, in the class of 2028, Lumiere had 11 students accepted at Stanford, 9 students accepted at Yale, 13 at UPenn and 20 at Cornell among 100+ other institutions.

We also analyze how these candidates use research in their application and find three main conclusions: A) over **98% of respondents used their research project** in their college applications, B) **students who published their research were 20% more likely to get into a top university,** and C) successful students used research as part of a narrative to demonstrate expertise in a field.

CONTEXT

Applying during the early admissions cycle to US universities is an increasingly competitive process with the total number of applications having increased by 65% in 2023-242 compared to pre-pandemic levels. Applicants were also applying to more schools in 2023-2024, averaging out to almost 4.01 applications per applicant (+17%). Moreover, there has been a marked shift in what universities look for in students. Competitive universities such as Brown, Dartmouth and MIT have also brought back SAT and ACT requirements as a response to a decline in college readiness benchmarks[3], reprioritizing the importance of college essays[4] and supplementary application materials like innovative projects, community service endeavors, and research portfolios as a means to assemble a diverse class of students who are markedly creative, enterprising, and committed.

We published a similar report last year that compared Lumiere students to the general admission pool and found that students who did research were 40% more likely than the general pool to be accepted into a top university. This report is an update on that and analyzes the latest admission cycle data.

Using survey and interview data from Lumiere alumni, we examine how students most effectively use independent research experiences to build their

profile during high school and set themselves apart in the college application process.

We have a ringside view to this at Lumiere, having guided over 4000 students from more than 80 different countries on their independent research projects. Our students qualified for various **scholarships such as the Richmond and Premier Scholar at the University of Richmond and Miami respectively, receiving the International Scholar Award at the University of Toronto and even more scholarships at Pratt, Parsons, School of Art Institute of Chicago and the Savannah College of Art and Design.** To find out how our program helped them in their admissions process, we reached out to alumni graduating high school in 2024 to collect some data on the most recent admissions cycle.

The survey asked for the colleges that they had applied to and their results, information on how they talked about research in their application and any other reflections they had on the process. We analyzed this quantitative data to formulate some key takeaways for this year. Finally, to dig deeper into their stories, we did in-depth interviews with 8 Lumiere alumni[5] that you can read about in Section 2 of this report.

HERE'S WHAT WE FOUND

We collected data from

529

LUMIERE ALUMNI

about their admission results and their use of research in the application process.

These students received acceptances from almost

200

UNIVERSITIES

BREAKDOWN OF OUR TOP RESULTS

University	# Lumiere Applicants	# Lumiere Acceptances	Lumiere Acceptance Rate	Overall College Acceptance Rate[6]	Increased Odds of Admission
Yale	62	9	15%	4%	3.6x
Stanford	56	11	20%	4%	4.9x
Princeton	50	3	6%	5%	1.3x
Pennsylvania	82	13	16%	5%	3.1x
Harvard	49	5	10%	4%	2.5x
Dartmouth	43	5	12%	7%	1.6x
Cornell	88	20	23%	7%	3.1x
Columbia	45	6	13%	4%	3.3x
Brown	64	12	19%	5%	3.6x
Total	539	84	15.58%	5%	3.1x

This year, our scholars were admitted to the following universities in the US:

Arizona
Arizona State University Main Campus

California
- Stanford University
- California Institute of Technology
- Santa Clara University
- University of California, Davis
- University of California, San Diego
- University of Southern California
- University of California, Irvine
- University of California, Santa Barbara

Colorado
University of Denver

Connecticut
Yale University

Georgia
- Emory University
- Georgia State University
- University of Georgia
- Georgia Institute of Technology

Illinois
- Illinois Institute of Technology
- Northwestern University
- University of Chicago
- Northwestern University
- University of Illinois Urbana-Champaign

Indiana
- University of Notre Dame
- Indiana University at Bloomington

Massachusetts
- Harvard University
- University of Massachusetts at Amherst
- Massachusetts Institute of Technology
- Worcester Polytechnic Institute
- Northeastern University

Indiana
University of Notre Dame

Michigan
- Michigan State University

Minnesota
- University of Minnesota Twin Cities
- Macalester College

New Jersey
- Rutgers at New Brunswick
- Drew University
- Seton Hall University
- Rutgers State University at Newark
- Princeton University

New York
- Fordham University
- Barnard College
- Columbia University
- Union College
- New York University
- Cornell University

Ohio
- Case Western Reserve University
- Ohio University
- College of Wooster

Oregon
Reed College

Rhode Island
Brown University

Chicago
University of Chicago

New Hampshire
Dartmouth College

Pittsburgh
Carnegie Mellon University

Missouri
Washington University in St. Louis

Florida
University of Florida

Pennsylvania
- University of Pittsburgh – Main Campus
- Carnegie Mellon University
- University of Pennsylvania
- Pennsylvania State Univ. Main Campus

Tennessee
- Vanderbilt University

Texas
- Texas A&M Univ. at College Station
- University of Texas at Austin
- Rice University

Virginia
- Virginia Commonwealth University
- University of Virginia

Washington D.C
Georgetown University

North Carolina
- Duke University
- University of North Carolina at Chapel Hill

Maryland
Johns Hopkins University

Maryland
University of California, Berkeley

Los Angeles
University of California, Los Angeles

Houston
Rice University

Michigan
University of Michigan-Ann Arbor

Wisconsin
University of Wisconsin-Madison

*** This is an abridged list of student acceptances and the full list can be found in Appendix 1**

To understand the role of research in selective college admissions, we examined the set of students using the Lumiere research program as part of their college applications and the acceptance rates for students who used their research paper to apply to a Top University[1]:

	% of Lumiere students who used their research project in their college application	% of these Lumiere students who got accepted to a Top University
I spoke about Lumiere in an admissions interview	47%	38
I included it in my “Activities” section	53%	50%
I wrote about Lumiere in either a main or supplemental essay	30%	54%
I included my Lumiere paper as a link/attachment	17%	56%
I included either the evaluation or a recommendation letter from my mentor in my application	21%	57%

	Number of students accepted to a top university	Total number of students	% of students accepted to a top university
Yes, I published it in an academic journal or publication	65	111	59%
I did not submit my paper anywhere else after the end of the program	75	154	49%

Source: Number of students that used Lumiere as part of their application; N = 523; Lumiere Alumni University Application Update Survey 2024; N = 529

While almost all respondents used their Lumiere research project in some way in their college application, they framed it in different ways. We probed this further to gain insights into the nature of the impact that research can have based on where and how it is used. The results are enlightening.

For instance,

AROUND

67% of students who used their mentor evaluation in the application were offered acceptances from at least one top-20 university.

Similarly,

ALMOST

55% of students who asked their mentors for a recommendation letter secured positive results as well.

Our analysis of the data suggests three clear takeaways:

01 **Successful students don't just list their research as an activity** – they provide context and description either through essays or by mentioning it in interviews to craft a cohesive narrative of their high school journey.

02 **Mentors provide great external validation** – not just because most of them are from top universities but also due to the unique and intensive nature of their engagement with the student, they are able to offer novel insights into the scholar's capabilities. A significant chunk of our students asked their mentors for letters of recommendation and/or submitted an evaluation as part of their application.

03 **Publications offer an added edge to student profiles** – students that published their research papers were 20% more likely to receive an acceptance from one of the top universities when compared to students that did not submit/publish their paper at all. Qualitative data from speaking with students about their admissions experiences suggests that this boost is a direct result of the added legitimacy offered by competitive and selective journals.

To better understand how students use research in the high school profile building and application process, the next section covers eight case studies in greater detail.

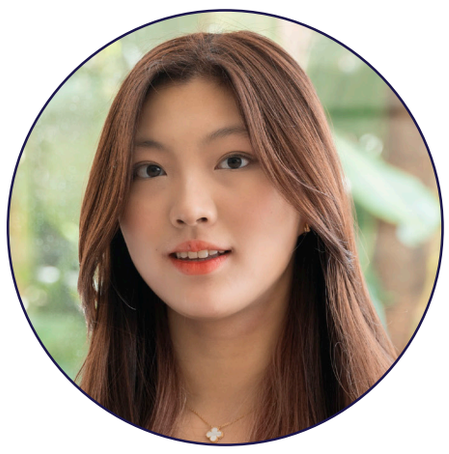
[6]The data is susceptible to limitations like self-reporting bias (respondents who got accepted are more likely to respond) and the small data set which cannot be used to establish unequivocal causation.

HOW THEY DID IT: CASE STUDIES OF RESEARCH IN THE PROFILE-BUILDING PROCESS

Based on in-depth interviews[6] with Lumiere alumni and analysis of their research material, this section outlines the case studies of the paths that 8 students took when doing research in their high school journeys and showcasing it in the college application process. The aim is to identify how students in different disciplines and goals communicated the content and value of their research effectively when applying to college.

Case study 1

RESEARCH AS A COMMON THREAD THROUGH DIFFERENT PARTS OF THE COLLEGE APPLICATION PROCESS



Yale

YIQIAO (MIFFY) WANG

Location: **Massachusetts, USA**

Mentor: **Michaela,** PhD Forestry and Environmental Studies at **Yale University**

Universities Accepted To: **Yale University**

Miffy knew early on that she was interested in environmental science because she participated in a variety of programs in and out of school but in her junior year, she found herself with an opportunity to dive headfirst into the subject. Her AP Environmental Science class provided a strong theoretical framework to use as a foundation for research and she was simultaneously able

to take advantage of a marsh near her school as a real-world laboratory for her newfound curiosity.

When searching for ways to turn this opportunity into an academically rigorous project, she found Lumiere through the recommendation of a friend (who happened to be a Lumiere alum!). Now under the guidance of her mentor, a PhD candidate in Forestry and Environmental Studies at Yale University, Miffy began exploring the process of research in more detail, crediting her mentor with offering valuable insights into the ideation of her research question, support in the structure of the paper and specific recommendations on the most effective research methodologies. The combination of this counsel allowed her to enhance her interest in the subject by giving it a more concrete direction.

Her research project focused on revealing the ecological dynamics of marshlands, with a specific emphasis on exploring the carbon sequestration benefits of an invasive species of plants – phragmites. Her research helped illuminate the unforeseen advantages of this invasive species and its positive impact on the surrounding ecosystem. Miffy's methodological approach included a comprehensive meta-analysis comparing Chinese and American marshlands, coupled with an on-site study employing drone mapping.

When it was time for her to begin working on college applications, Miffy found that her research project **provided an effective connective tissue for admission officers evaluating her application** because she was able to strategically weave it into the various activities and projects she had worked on throughout high school. For example, she integrated it into her common application by adding it under the activities section and also sent it to Yale as a research paper supplement. She was also able to publish her research paper in the National High School Journal of Science and featured this accomplishment

prominently throughout her application. She even mentioned it in her interview and **discussed it as a natural progression** of her strong interest in environmental science. For Miffy, this process resulted in being accepted to Yale.

Miffy's case demonstrates **the effectiveness of doing research on a topic that is an important and organic part of the student's academic interests because it allows students to present these interests** as being inextricably linked to their journey through high school – indicating a very clear vision for their next step into university.

Case study 2

RESEARCH AS A SERIES OF STEPS GUIDING FUTURE CAREER DECISIONS

TAARINI KAUL

Location: **Dilijan, Armenia**

Mentor: **Daniel,** PhD Medicine at **University of Cambridge**

Universities Accepted To: **Princeton University**

Taarini could not have predicted how her interest in biochemistry and medicine would grow throughout her life. At first, it was a spark encouraged and fed by her mother who had studied Chemistry in college and was proud to see her daughter take to this subject. As a teenager, this interest took her to shows like Grey's Anatomy, The Good Doctor and House M.D., filling her with a fascination for the medical field and a keen hunger to understand how all of it worked together on a fundamental level. During her interview, she described

how even when she was cooking, she couldn't stop thinking about how each ingredient fused together through the process and what it contributed or brought to the meal as a whole.

Cooking as a series of chemical reactions was just the first step, because Taarini took this interest seriously and in the summer before high school, interned at the TATA Cancer Research Hospital. She shadowed the doctors at this institute, reading patient charts and understanding how treatments needed to be modified based on patient symptoms - biochemical indicators used to evaluate and facilitate recovery. She also witnessed patients receiving palliative care, an experience that she recounts as harrowing and one that almost made her rethink whether she wanted to continue into this field. However, she could not look away from what she saw as a painful but very important support system and it was this importance that pushed her deeper into this subject.

When Taarini began working with Lumiere, she researched the usability of 3D printing and stem cells in reconstructive surgery for patients suffering from breast cancer. **Informed by her experiences at the cancer research hospital, she used the research as a way to consolidate her knowledge** on the on-ground care offered to patients. Supplementing this research were the Biology, Chemistry and Economics classes part of her IB curriculum. Her Economics class specifically infused her journey with a new element, pushing her to think about the affordability and accessibility of medical care available to patients at these institutions. At the same time, she credits her mentor and the Lumiere program in helping her **understand the value of using secondary data sources to enhance medical research and healthcare policies.**

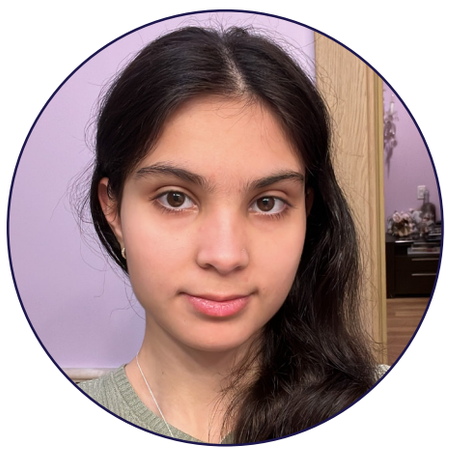
Her research paper brought all of these interests together and became aligned with her university goals - she applied to and got accepted at Princeton planning to

major in chemistry and minor in economic healthcare. What started out as a deep-seated interest in how medicine and chemistry worked evolved into a focus on medical research and the policies capable of making this research exponentially more impactful by improving access to patients that could benefit from it.

During our interview, Taarini looked back at the stressful process of applying to universities and laughed. **“There is light at the end of the tunnel” she said, “[the application process] teaches you a lot about yourself.”** For Taarini, her journey as a researcher was emblematic of the research process - understanding a topic, diving deeper into it and then building upon it for the next step. Looking back with an analogy, Taarini’s current meal was a result of each ingredient that was added to the process, from the Cancer Research Institute to the economic considerations of medical healthcare, all cooked to perfection through each successive research opportunity.

Case study 3

USING RESEARCH AS A WAY TO BUILD AND HIGHLIGHT COLLEGE READINESS SKILLS



Cornell University

AMALIYA ATAMALIBEKOVA

Location: **Larchmont, USA**

Mentor: **Sanah,** PhD Physics at **Yale University**

Universities Accepted To: **Cornell University,** New York University

Amaliya’s K-12 school was an almost intimate community, accommodating 75 students with no access

to advanced curricula like AP or IB courses and even fewer extracurricular activities to explore. However, the size of this community also enabled school faculty to take a more nuanced approach with their students and build stronger relationships with them. In fact, this would ultimately play a pivotal role in Amaliya's academic journey as it was her principal who recognized Amaliya's aptitude for research and directed her towards the Lumiere Research Scholar Program.

Amaliya joined the program in the winter of 2021 and found astronomy to be her biggest area of interest. She worked with her mentor, a PhD candidate in Physics at Yale University to explore active galactic nuclei - black holes that emit massive amounts of electromagnetic radiation and are responsible for the majority of luminosity produced in the universe. The largest of these nuclei are classified as quasars - something Amaliya learned as she recounted the initial difficulty she encountered in trying to read through and make sense of the current literature on the topic. At first, even this first step was a huge leap for her because she was unaccustomed to scientific writing at this level and had previously only engaged with it through the limited curriculum at her school.

In the interview we did with her, Amaliya spoke about the invaluable support offered by her mentor in helping her get used to the scientific jargon in these papers while guiding the development of her writing skills. Talking about it now, she **describes the program as a much-needed crash course in research methodologies and academic writing;** skills she could not have imagined being vital to her academic growth only a few months ago. Amaliya used these skills, along with the resources and suggestions provided by her mentor to get her research paper published and evolve this idea into a final project at her school as well. Now that she felt more confident in her skills as a researcher, it was simply a matter of applying them effectively!

As Amaliya began approaching her projects as a chance to strengthen her skill set, she brought this perspective with her in the college application process as well. When applying to different universities, she would **look up specific professors at these universities and talk about how she could contribute to their respective classes because their research interests aligned with the kind of skills she wanted to explore** as a natural evolution of her own research interest. Instead of treating the project as just an accomplishment, Amaliya framed it as an ongoing arc aimed at developing her competencies as a researcher.

The success of this approach is evidenced by her being accepted to Cornell. When asked if she had some advice for other students like her, Amaliya emphasized **the importance of reframing a lack of traditional academic skills as an area of growth instead of a limitation**; after all, she got into Cornell without any APs and created the foundation for her profile through an unorthodox approach.

Case study 4

TRANSFORMING PASSION INTO LIFE-LONG GOALS THROUGH RESEARCH

JAIVEER SINGH MADAN

Location: **Kolkata, India**

Mentor: **Ahmed,** PhD Physics at **Purdue University**

Universities Accepted To: Brown University, Boston University, University of Edinburgh, **London School of Economics**

Jaiveer grew up learning about business and finance by spending time at his dad's electronics shop in Kolkata,

India. He would look through the account books, help his father at the bank and took an interest in the day-to-day minutiae involved in running the shop. At the same time, he used the free time afforded by online school during the pandemic to join a business media internship which helped him get some on-ground experience in these topics in the tenth grade. With the goal of taking his dad's entrepreneurial spirit forward in his own professional career, Jaiveer decided that he pursue financial maths and statistics for his higher education.

However, he also had another interest. As a child, Jaiveer developed a stammer that threatened to impact how easily he could interact with his peers and communicate his thoughts clearly. He joined his school's Model UN team, became invested in theater and participated in elocution as well as debate competitions – all with the goal of improving his speaking skills.

All this time, he wanted to understand where this stammer came from and whether he could gain more tools to navigate it through an academic understanding of the condition. Jaiveer found Lumiere through the recommendation of his counselors as a junior. During his initial discussions with the mentor, he realized that he wanted to research the underlying cause for his stammer. Jaiveer originally wanted to focus on the physiological component of a stammer but quickly realized that potential genetic, psychological and neurological factors may also be at play.

Jaiveer credits his mentor and the writing coaches with **strengthening his communication and writing skills, helping him shift his approach to studying from rote-memorization to critical thinking** and sparking a now life-long interest in understanding the condition. He developed an independent theory on how stammers develop during childhood and realized that he wanted to

pursue this research side by side with his interest in financial maths.

Now with two distinct goals he was passionate about, Jaiveer applied to universities in the US and UK. He received a 100% scholarship for the Lumiere program and featured his paper prominently in his applications, mentioning it in his interviews and elaborating on it as part of his main essays.

Jaiveer received acceptances from Brown University, Boston University, University of Edinburgh and London School of Economics among others, finalizing LSE as his school of choice.

While discussing his journey, Jaiveer **credited the research process in helping him focus his goal and mentioned that he would apply himself to his research topic with renewed zeal once he began his classes** by sharing his paper with Oxford and Cambridge professors, workshopping his theory on the development of a stammer and eventually (though he does refer to this as a "far-fetched" goal) finding a potential cure for the condition.

Jaiveer found his priorities transformed through research, enabling him to delve deeper into a topic of great personal importance for him while simultaneously taking the next step in his professional career.

Case study 5

RESEARCH AS THE FIRST STEP INTO HIGHER LEVEL ACADEMIA

UNIVERSITY OF OXFORD

HANS DEEPAK

Location: **New Delhi, India**

Mentor: **Emmah,** PhD International Relations and Gender Studies at **University of Cambridge**

Universities Accepted To: **University of Oxford**

Hans knew he was interested in history from the age of 3 when he fell in love with a picture book his father got him. He would pursue this interest on and off throughout his childhood while trying to navigate the expectations of becoming an engineer instead – at one point, he thought he might be able to combine his passion for history with automobile or mechanical engineering by studying military vehicles but quickly realized that he was far more interested in the story behind these tanks than he was in their firepower. However, engineering was a more focused interest and while he loved history, he wasn't sure if he knew what his speciality would be if he decided to pursue history instead. He would have to be certain if he wanted to take this forward.

This is when Hans joined Lumiere and over the first 3 weeks, he delved into his interests with the passion of an explorer searching for treasure. For Hans, this treasure would be finding his true north within the academic historical literature and he found it when coming up with his research questions; he wanted to delve into 20th century Chinese history.

With his goal now squarely in front of him, Hans recalls that the Lumiere program helped him develop

fundamental research and writing skills as he figured out **how to synthesize new information to gain meaningful insights backed by comprehensive research.** With the certainty brought about by this experience, he decided to apply for a History & Politics program to UK universities. His application was **primarily research-oriented given the academic focus of the UK education system** and Hans mentions that the **skills he learned from his research experience played a pivotal role in his interviews** where he was asked to analyze historical sources and provide contextual insights. He also used his research with Lumiere as a springboard to launch himself into a second research paper, **which was published in The Concord Review (the top humanities journal for high school students!).**

Hans has gotten accepted to The University of Oxford and is determined to take his research forward through his program this fall. His journey with Lumiere galvanized the kind of skills he needed to take his place in academia and brought him the confidence to pursue this goal with the certainty of a scholar.

Case study 6

RESEARCH AS A TOOL FOR ACADEMIC SYNERGY WITH THE HIGH SCHOOL CURRICULUM

HARVARD UNIVERSITY

YAREN YURT

Location: **Diyarbakir, Turkey**

Mentor: **Grace,** PhD Biochemistry at **University of Cambridge**

Universities Accepted To: **Harvard University,** University of British Columbia

Yaren is the quintessential well rounded high school senior. Voted president by her peers, she volunteered at two different NGOs in Turkey, participated in an internship at Santa Cruz University and conducted research on the early detection of breast cancer and personalized medical care. As a volunteer, she worked with an organization providing earthquake relief services and also collaborated with an online education platform to teach students from underserved communities basic English/Math skills under the effort of improving access to quality education.

When Yaren began working on her college applications, she did not have an SAT score to share and only provided 2 AP courses in her application at the time. Her research with Lumiere was the most academically rigorous project she was adding to her application and upon recalling the admissions process, she is sure that her research paper was the strongest academic takeaway for the admission officers as well.

Yaren was very cognizant of the academic skills she was able to develop through the paper and thanked her mentor for providing a sounding board throughout the application process. **She explained that a lot of the apprehension**

regarding her applications was alleviated when she discussed the process with her mentor. The journey had its own set of obstacles for her as she broke her arm at one point during the process and had to pause the program while she recovered. Yaren was grateful that she was able to balance the academic and personal aspects of her student life through the support of the Lumiere team at this time.

She laughed as she discussed her interview with Harvard University; Yaren was sure it hadn't gone well because despite being a multi-faceted student, she knew **how important a demonstrated academic potential was for her application and she wanted all of these different components to come together for maximum impact.** Her research paper with Lumiere allowed her to present a cohesive and more focused application during this process, something she credits in playing an important role in her acceptance from Harvard.

Yaren will be joining the campus in a few months, is beyond excited about this opportunity and is moving forward with one clear resolution: continue to build on her research interests and delve deeper into an academically rigorous program. Now that she's taken her first step into Neuroscience through her research paper, she's elated at the prospect of forging a path into this field at Harvard.

Case study 7

USING RESEARCH TO EXPLORE NATIONAL AND INTERNATIONAL ACADEMIC OPPORTUNITIES

MAKENNA BLAIR

Location: **Stephens City, USA**

Mentor: **Nathaniel,** PhD Neurophysiology at **Carnegie Mellon University**

Universities Accepted To: **Duke University**

Duke

Makenna grew up in Stephens City, Virginia and quickly realized that while she was very interested in researching medicine from an early age, she would have to get creative in pursuing this topic because she didn't have a robust support system for this journey at school. Witnessing her mother navigate an autoimmune disease while managing her own business was the earliest she remembers wanting to research and she quickly dived into various books and articles on the topic. At that age, it was a way for her to dip her toes in what would eventually become a passion for life.

It didn't take Makenna long to take this interest even further – it was Grade 6 when she first participated in a science fair and this would become an annual tradition for her all the way up to her junior year. She regularly won this fair and found that with each year, her interest evolved from autoimmune diseases to cancer research. By this point, Makenna had started exploring opportunities beyond school through a part-time opportunity at the local hospital where she worked primarily in patient care. Her experience with these patients made her more aware of the absence of mental health support and pushed her to start a community awareness program. With additional support from her teacher, she submitted this program at

the prestigious DECA International Career Development Conference. Using feedback from the judges, she improved the program and established a non-profit organization in June 2023 to provide mental health care to patients at hospitals.

Simultaneously, Makenna was conducting cold outreach to hundreds of professors as a way to find meaningful research opportunities but only received responses from professors that would be too far for Makenna to travel. She had a non-profit organization, 7 years of continuous research practice through multiple science fairs that had strengthened her ability to incorporate nuanced and complex ideas into her research and a dearth of professors she could work with to take the next step. She describes this part of her journey as “a writer’s block for researchers”, feeling stuck in the process.

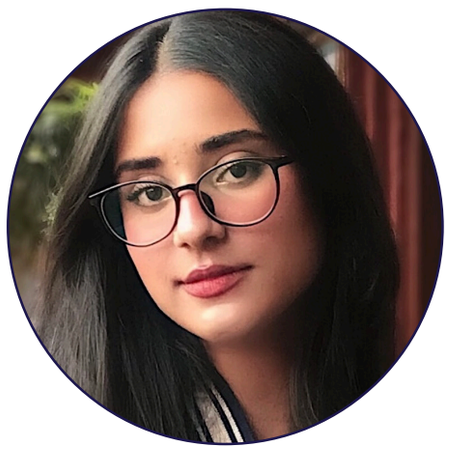
Finally, Makenna found and joined the Lumiere Research Scholar Program with a 100% scholarship in her senior year. Now able to channel her energy into an online program, she recalls being very grateful to her mentor for pushing her to think outside the box. When she joined the program, she was steadfast in wanting to continue research in the same vein as she had for most of her academic life but because she came into the program with a lot of research experience, her mentor **assured her that she had time to explore her options and allow her ideas to develop even further.** After intense brainstorming, she experienced another evolution in her research interest - from autoimmune diseases to cancer and now from cancer to its correlation with Huntington’s Disease; this correlation would form the basis of her research question. She also credits the program for improving her skills with scientific writing, helping her write in a way that was more accessible to laymen without sacrificing the subject specific details required in her research.

Proud of her research, Makenna **sent her abstract to various universities during her application process,** including Columbia University. She knew that the next step in her journey as a researcher would need a robust support system, access to laboratories and interactions with experts in the field. Having **gotten accepted to Duke University with a 100% scholarship as well,** Makenna looked relieved and determined during her interview because she knew that she would be able to utilize all three at her campus starting this fall.

Her ultimate goal? Combine her research skills to expand the type of care available at her non-profit organization and return to Stephens City with a support system capable of augmenting the level of opportunities available to students like her and the patients in need of holistic care.

Case study 8

RESEARCH AS THE KEY TO PROACTIVELY EXPLORING ACADEMICALLY RIGOROUS OPPORTUNITIES IN AN OTHERWISE LIMITED SETTING



Stanford University

MALAIKA NASEER

Location: **Lahore, Pakistan**

Mentor: **SLaura, P**hD Biomedical Informatics at Rutgers State **University of New Jersey**

Universities Accepted To: **V**anderbilt University, Brown University, **Stanford University,** University of Edinburgh, University of California Berkeley.

At Malaika's school in Pakistan, she was always encouraged to prioritize her grades and school work above

everything else. While this was important in building a strong academic foundation for her, she did not have a variety of avenues to explore in terms of applying this knowledge outside school as a way to develop skills beyond her curriculum. It was only after her brother conducted research with Lumiere in 2020 that she became aware of the program. His encouragement was the driving force behind Malaika following suit so that she could develop her research and writing skills outside school.

The Lumiere Research Scholar Program provided her with a platform to explore biology and environmental sciences – subjects she had been interested in throughout her academic journey – with **full financial aid**. Her paper examined the consequences of climate change on disease prevalence and the program structure helped familiarize Malaika with the entire research process – from learning how to develop a viable research question to framing a meaningful call to action signaled by the conclusion of her data. She was keen on explaining how **the writing skills she developed through this project came in very handy when she began working on her university application process.** Beyond that, she was also very grateful for the flexibility in her meeting schedule because it allowed her to balance her grades at school with an **enhanced exploration of the subject through a lab-based internship** where she worked with a team with the aim of developing sustainable fuel options.

When it was time for her to present this work in her university applications, Malaika applied to Stanford, Oxford, Edinburgh, among others and presented her research in her personal statement, common app activities section and supplemental essays. For Malaika, it helped her create a very compelling narrative for Stanford's Intellectual Vitality essay because she was able to **frame her journey as one of an internally motivated and driven student capable of overcoming systemic and**

circumstantial challenges for the purpose of exploring academically challenging opportunities.

Malaika's journey and zeal took her from being a STEM-oriented high school student to a soon-to-be Stanford freshman this fall, with the research program allowing her to access and open doors in a path that did not naturally provide her with such opportunities.

CONCLUSION

In a competitive admissions cycle, students who did research projects had strong admissions outcomes at selective universities. Some Lumiere alumni showcased their research in their list of activities or through a recommendation letter, to prove their academic ability and expertise. Others built on their research through publications and reflected on their experiences in essays to demonstrate personal growth and social commitment. By identifying and effectively communicating the larger narrative that their research is placed in, applicants can make a convincing case for their candidacy and prepare themselves well for college.

NOTES

[1] In this context, “top university” is defined as one of the 20 highest ranking universities globally including 8 Ivy League universities and Stanford University. https://www.usnews.com/education/best-global-universities/rankings

[2] From https://www.forbes.com/sites/michaeltnietzel/2023/11/27/applications-to-college-for-2024-show-strong-early-surge/?sh=57eb7578c3b3

[3] From https://www.edweek.org/teaching-learning/students-feel-good-about-their-college-readiness-these-charts-tell-a-different-story/2024/03

[4] From https://www.forbes.com/sites/avivalegatt/2024/03/28/college-admissions-trends-for-2024/?sh=30d9ea62245a

[5] Thank you to the 8 students for contributing to the case studies.

[6] Admissions acceptance rates are from the most recent year for which data is available. The acceptance rate for Lumiere alumni is calculated based on the number of survey respondents who applied to a given university, and who were admitted. Appendix 2 provides a full breakdown of student acceptances

APPENDIX 1

Full list of admission results

• American University of Beirut (1)

Amherst College (3)

Arizona State University Main campus (13)

Auburn University-Main Campus (1)

Barnard College (10)

Baylor University (4)

Bentley College (2)

Boston College (5)

Boston University (27)

Brandeis University (6)

Brown University (12)

Bryn Mawr College (1)

Bucknell University (3)

Butler University (1)

Cairo University (1)

California Institute of Technology (1)

California Polytechnic-San Luis (5)

Cardiff University (3)

Carleton College (1)

Carleton University (1)

Carnegie Mellon University (17)

Case Western Reserve University (23)

Chapman University (1)

City University of Hong Kong (1)

Claremont McKenna College (1)

Clarkson University (1)

Clemson University (1)

Colby College (3)

Colgate University (5)

College of Charleston (1)

College of the Holy Cross (1)

College of William and Mary (6)

College of Wooster (2)

Colorado College (1)

Columbia University (6)

Cornell University (20)

Dartmouth College (5)

Denison University (1)

Drew University (1)

Duke University (13)

Durham University (7)

Eckerd College (1)

Elon College (1)

Embry Riddle Aeronautical University (1)

Emory University (20)

Florida Institute of Technology (1)

Florida International University (1)

Florida State University (1)

Fordham University (14)

Furman University (1)

George Mason University (2)

George Washington University (7)

Georgetown College (1)

Georgetown University (6)

Georgia Institute of Technology (9)

Georgia State University (1)

Gettysburg College (1)

Hamilton College (2)

Hampton University (1)

Harvard University (5)

Harvey Mudd College (1)

Hofstra University (1)

Huron University (1)

Imperial College London (9)

Indiana University at Bloomington (14)

Iowa State University (1)

James Madison University (1)

Johns Hopkins University (17)

Kenyon College (1)

King's College London (15)

KU Leuven (1)

Lafayette College (2)

Lehigh University (4)

Lewis and Clark College (1)

London School of Economics and Political Science (4)

Louisiana State University at Baton Rouge (1)

Loyola Marymount University (3)

Loyola University Chicago (2)

Macalester College (2)

Manchester College (1)

Marist College (1)

Mary Washington College (1)

Massachusetts Institute of Technology (1)

McGill University (9)

McMaster University (2)

Mercer University (2)

Miami University at Oxford (3)

APPENDIX 1

Full list of early acceptance results

Michigan State University (11)

Minerva University (1)

Monmouth College (1)

New Jersey Institute of Technology (3)

New York University (14)

North Carolina State University at Raleigh (3)

Northeastern University (33)

Northwestern University (8)

Notre Dame College (1)

Oberlin College (3)

Occidental College (5)

Ohio State University (16)

Ohio University (1)

Ohio Wesleyan University (1)

Oklahoma State University (1)

Pennsylvania State Univ. Main Campus (29)

Pepperdine University (4)

Plymouth University (1)

Princeton University (3)

Purdue University at West Lafayette (33)

Queen Mary University of London (3)

Queens College (1)

Reed College (3)

Rensselaer Polytechnic Institute (3)

Rice University (7)

Rowan College of New Jersey (1)

Rutgers at New Brunswick (11)

Rutgers State University at Camden (9)

Rutgers State University at Newark (5)

Samford University (1)

San Diego State University (5)

Santa Clara University (11)

Sarah Lawrence College (2)

Savannah Coll. of Art and Design (2)

Seton Hall University (2)

Simon Fraser University (2)

Smith College (1)

Southern California College (1)

Southern Methodist University (2)

Stanford University (11)

Stevens Institute of Technology (1)

SUNY at Albany (1)

SUNY at Binghamton (3)

SUNY at Buffalo (1)

SUNY at Stony Brook (3)

Swarthmore College (1)

Syracuse University (12)

Texas A&M Univ. at College Station (3)

Texas Christian University (1)

The University of Queensland (1)

Trinity College CT (1)

Trinity College Dublin (2)

Tufts University (12)

Tulane University (6)

Union College NY (1)

University College Dublin (1)

University College London (17)

University of Alberta (3)

University of Amsterdam (1)

University of Bath (3)

University of Birmingham (5)

University of Bristol (8)

University of British Columbia (12)

University of Calgary (1)

University of California at Berkeley (27)

University of California at Irvine (34)

University of California, Davis (36)

University of California, Los Angeles (29)

University of California, San Diego (41)

University of California, Santa Barbara (16)

University of California, Santa Cruz (18)

University of Cambridge (5)

University of Chicago (7)

University of Connecticut at Storrs (2)

University of Dallas (1)

APPENDIX 1

Full list of early acceptance results

University of Dayton (1)

University of Denver (1)

University of East London (1)

University of Edinburgh (14)

University of Exeter (2)

University of Florida (6)

University of Georgia (3)

University of Glasgow (1)

University of Hawaii at Manoa (1)

University of Helsinki (1)

University of Hong Kong (1)

University of Illinois - Urbana (32)

University of Illinois at Chicago (1)

University of Kansas (1)

University of Leeds (1)

University of London (1)

University of Manchester (16)

University of Maryland at College Park (7)

University of Massachusetts at Amherst (21)

University of Massachusetts at Dartmouth (1)

University of Melbourne (1)

University of Miami (6)

University of Michigan at Ann Arbor (15)

University of Minnesota Twin Cities (8)

University of New South Wales (2)

University of North Carolina at Chapel Hill (11)

University of Notre Dame (4)

University of Nottingham (1)

University of Oregon (1)

University of Ottawa (1)

University of Oxford (2)

University of Pennsylvania (13)

University of Pittsburgh-Main Campus (13)

University of Portland (1)

University of Puget Sound (1)

University of Richmond (6)

University of Rochester (12)

University of San Diego (3)

University of San Francisco (2)

University of Sheffield (1)

University of South Florida (2)

University of Southampton (1)

University of Southern California (22)

University of St Andrews (8)

University of Sydney (2)

University of Technology Sydney (1)

University of Tennessee at Knoxville (1)

University of Texas at Austin (11)

University of the South (1)

University of Toronto (27)

University of Vermont (1)

University of Virginia (7)

University of Warwick (17)

University of Washington (21)

University of Waterloo (6)

University of Wisconsin at Madison (22)

University of York (1)

Utrecht University (1)

Vanderbilt University (8)

Vassar College (9)

Villanova University (1)

Virginia Tech (5)

Wabash College (1)

Wake Forest University (3)

Washington and Lee University (1)

Washington State University (3)

Washington University (2)

Washington University in St Louis (7)

Wellesley College (4)

Wesleyan University (6)

Whitman College (1)

Willamette University (1)

Williams College (2)

Worcester Polytechnic Institute (2)

Xavier University (1)

Yale University (9)

APPENDIX 2

Breakdown of Ivy Results

University	# Lumiere Scholars Applied	# Lumiere Scholars Accepted	% Lumiere Scholars Accepted	General Acceptance %	# of applications (estimate)
Brown University	64	12	19%	5%	48881
Cornell University	88	20	23%	7%	68000
Columbia University	45	6	13%	4%	60248
Dartmouth College	43	5	12%	7%	35207
Harvard University	49	5	10%	4%	54008
University of Pennsylvania	82	13	16%	5%	65230
Princeton University	50	3	6%	5%	39644
Yale University	62	9	15%	4%	57465
Stanford University	56	11	20%	4%	55737

NOTES:

- For universities that did not release early acceptance data, we have either used the latest available statistic or averaged the acceptance rate of other comparable universities.
- Acceptance rates are from the class of 2028 or most recent available data.

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Founded by Harvard & Oxford researchers, the Lumiere Research Scholar Program is a selective research program for talented students. In the program, students work 1-1 with a researcher from a top university to produce an independent research project.

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