Final Report of the Task Force on Clinic and Corporate Partnerships January 24, 2024

Dear HMC Community,

The Task Force on Clinic and Corporate Partnerships was established by President Harriet Nembhard in May, 2024 to address the following questions:

- How tuned is the range of sponsors, projects and corporate recruiting opportunities on offer to the needs and desires of students?
- Are there industries or disciplines that have not traditionally sponsored Clinics or engaged with Career Services with which we should make efforts to partner?
- Are there industries for which we should dial back our engagement around Clinic or Career Services?
- How can the programs handle situations in which students have objections to working with particular companies or in particular areas?
- Are there ways to draw in more nonprofits as sponsors or employment recruiters?
- What are short-, medium-, and long-term initiatives that would improve the programs and the accountability mechanisms for implementation?

This report represents a synthesis of the work of the Task Force over the past eight months in exploring these questions together with the Harvey Mudd community. We are grateful for everyone who contributed to this work, including everyone who provided their input via the surveys, forums, office hours, emails, and conversations with Task Force members.

Among the recommendations below, some recommendations are suggestions for improvement that can be implemented relatively easily and quickly with the available resources. Others are projects that will require significant resources before they can be fully realized. In these cases, where possible, we have tried to identify intermediate steps along the way to full implementation.

Harvey Mudd operates in a shared governance model. Successful adoption of the recommendations of the Task Force will thus require the coordinated action of multiple stakeholders across Harvey Mudd. By providing strategic directions that resonate with the Harvey Mudd community, the Task Force hopes to facilitate these multiple units working towards shared goals.

With gratitude for your time and consideration,

The Task Force on Clinic and Corporate Partnerships

Students:

Avani Anne '25 Ivan Dudiak '26 McKenna McMurray '26 Michael Mumo '28 Sadhvi Narayanan '27 Alina Scholz '25 Aabhas Senapati '27 Steven Zhang '28

Alumni:

Kathy French '97, President, Alumni Association Board of Governors (AABOG)

Staff:

Shannon Braun, Director of Career Services Colleen Coxe, Assistant Vice President for Sponsored Research and Projects

Faculty:

Zach Dodds, Professor of Computer Science and Leonhard-Johnson-Rae Chair of Computer Science

Erika Dyson, Associate Professor of Religious Studies and Willard W. Keith Jr. Fellow in the Humanities

Karl Haushalter, Seeley W. Mudd Professor of Chemistry and Biology and Chair, Department of Chemistry, Co-chair of the Task Force

Sarah Kavassalis, Assistant Professor of Climate and Chemistry

Leah Mendelson, Associate Professor of Engineering

Talithia Williams, Professor of Mathematics and Mathematics Clinic Director, Co-chair of the Task Force

Trustees:

Doo Chung '11, Member, Board of Trustees Michael Schubmehl '02, Vice Chair, Board of Trustees

Table of Contents:

- **1.0 Introduction**
- 2.0 Defense Work and Dissent
- 3.0 Academic Departments are the Locus for Conversations about Capstone Goals and Pathways
- 4.0 Create a Model for Career Development that Spans All Four Years and Prepares Students with Lifelong Skills
- **5.0 Building Capacity for Ethical Engagement**
- 6.0 Cultivate Community and Institutional Relationships to Enrich Student Learning
- 7.0 Affirm and Support Student Agency
- 8.0 Create Budget Flexibility for Departments to Pursue Creative Capstones
- 9.0 Conclusion

1.0 Introduction

The Strategic Planning Task Force on Clinic and Corporate Partnerships (https://mc.edu/tfccp) is tasked with assessing the Clinic program and corporate partnerships to understand the programs' strengths as well as identify areas of improvement, ensuring alignment with the College's educational goals and mission, the needs of our students, and HMC's emerging strategic plan.

Harvey Mudd College's mission has always been to nurture well-rounded, socially conscious leaders equipped to make a positive impact on the world. This commitment is reflected in the recommendations outlined in this report, which seek to strengthen the alignment between HMC's values, its educational offerings, and the aspirations of its community members in the context of HMC's Clinic and corporate partnerships programs. Anchored in the goals of our Strategic Plan, "STEM for a Better World," these recommendations emphasize ethical engagement, student empowerment, and community collaboration, forming a pathway to support a more inclusive and responsive educational experience.

Through extensive feedback from students, faculty, staff, and alumni, several key priorities emerged: the need for deeper ethical understanding, greater inclusivity in institutional partnerships, a curriculum that supports diverse pathways, and robust structures that allow students to meaningfully participate in shaping their educational journey. The importance of being strategic about how we deploy our finite time, energy and resources was an additional theme that emerged from the feedback. By listening to and valuing all of these insights, the Task Force hopes to foster an environment which better prepares students not only for professional success but also for the personal fulfillment that comes from thoughtfully defining and acting on socially responsive choices.

The Task Force is putting forward this set of recommendations, recognizing that resources will be required, including time and funds, to bring some of these recommendations to fruition. Those recommendations are designed to serve as building blocks for the Strategic Plan's focus on "Transformative Partnerships and Societal Impact," advancing HMC as a leader in inclusive, values-based education.

2.0 Defense Work and Dissent

What We Heard

Some community members have expressed deep concern about HMC's engagement with defense companies, citing human rights and ethical concerns surrounding how U.S. weapons are used. The most intense objections were tied to Israel's campaigns in Gaza and Lebanon in response to Hamas's October 7, 2023 attacks, highlighting civilian casualties and collateral damage caused by Israel's use of weapons supplied and manufactured by the U.S. In light of these concerns, the Task Force has heard and understood calls for HMC to cut ties with defense companies.

These calls spurred other members of the HMC community to raise practical and geopolitical arguments against severing ties with defense companies. These comments focused on the importance of defense work to national security and global stability, arguing that the defense industry is critical for the safety and security of U.S. citizens and allies. Community members cited the conflict in Ukraine, where U.S. military technology plays a crucial role in resisting aggression, as evidence that marginalized communities may not benefit from a reduced U.S. military presence on the global stage.

We also heard concerns about the potential damage to academic freedom and the reduced diversity of opportunities available to students, particularly those aiming for careers in the aerospace and defense sectors. Commenters cited the Kalven Committee's perspective that institutions of higher education should remain neutral, allowing individuals rather than institutions to be the instruments of dissent and criticism. Subsequent conversations highlighted a desire for continued dialogue around the interplay between personal and community standards of ethics. We were particularly concerned to hear members of every part of the community express reluctance to discuss their extremely varied perspectives, for fear of social or professional retaliation.

Others objected to institutional neutrality as a concept, citing Howard Zinn's sentiment that "you can't be neutral on a moving train." Neutrality, they argued, effectively supports the status quo, which some believe makes one complicit in violence around the world.

Below, the Task Force attempts to faithfully articulate some of the key arguments we heard for and against cutting ties with defense companies and institutional neutrality before making recommendations. While it's simply not possible to make recommendations that will be universally lauded, we want the entire HMC community to understand that their passionate, articulate, and well-reasoned arguments have been heard, understood, and carefully weighed. We are grateful to the many people who spent significant time engaging with the Task Force, either face-to-face or in writing.

Arguments For Cutting Defense Ties

- Some members of the HMC community disapprove of Israel's response to Hamas's
 October 7, 2023 attacks on Israeli civilians and military personnel. Some feel the Israeli
 Defense Forces have not been sufficiently careful to prevent civilian casualties in Gaza
 and Lebanon, while others believe the Israeli government is actively pursuing genocide
 against Palestinians.
- 2. Israel receives <u>significant military aid</u> from the U.S., much of it through the Foreign Military Financing program. This aid comes in the form of grants that must be used to purchase weapons and services from the U.S. defense industry. Although Israel has a significant domestic defense industry, the U.S. is by far its largest foreign supplier.
- 3. Support for Israel's military in the U.S. government remains strong. The Biden administration expressed displeasure with Prime Minister Benjamin Netanyahu's prosecution of the war, but largely declined to attach meaningful conditions to further military aid.
- 4. Some members of the HMC community would like to see the College take direct action by condemning defense companies and articulating a policy that prohibits them from working with students through the Clinic program, and from recruiting through the Office of Career Services (OCS), including at career fairs. In addition to making it harder for those companies to recruit talented HMC students, some feel that making a public statement against the defense industry would put HMC in a position to lead by example, possibly causing other larger institutions to follow suit. The goal of imposing these perceived costs on defense companies is either to force them to modify their behavior and refuse to sell further arms to Israel, or to deprive them of the talent necessary to operate at all.
- 5. Other members of the community simply feel that defense work is incompatible with HMC's mission to educate students who are "aware of the impact of their work on society." Not taking a stand, they argue, is effectively an endorsement of the status quo. It's not sufficient for individuals to opt out of work that's incompatible with their personal sense of ethics because any such work that takes place through the institution makes the whole community complicit in violence.
- 6. Still others object to HMC normalizing defense work, platforming defense companies, or steering students into defense work, either implicitly or explicitly.
- 7. A few members of the HMC community have pointed out that weapons and surveillance technology developed for use in combat are frequently repurposed for use on U.S. soil in ways that disproportionately impact people of color.

Arguments Against Cutting Defense Ties

- The U.S. has a compelling interest in defending its citizens and allies against threats
 from individuals, organizations, and governments that seek to do them harm. Some
 members of the community argue that defense work is not only ethical, but imperative.
 Citizens of democracies have the right and responsibility to ask their governments
 difficult questions about how force will be used in their names, but unilateral
 disarmament is not the only option.
- 2. Other members of the community argued that it's not at all clear that marginalized people would be better off without a strong U.S. presence on the international scene to serve as a counterweight to other world and regional powers. It's not clear the U.S. could maintain its influence if we disarmed and abandoned our allies.
- 3. The HMC community's views on disengagement with defense companies are nuanced. Many do not want to see Clinic projects that work directly on weapons manufacturing, but most are okay with defensive and dual-use technologies, and with non-defense projects sponsored by companies that also do defense work. A majority of the community also wants to see Clinic projects offered to interested students even over the objections of others.
- 4. We heard arguments that the Clinic program is too small to materially degrade defense companies by not recruiting them to sponsor projects, even if it were desirable to do so. HMC also graduates too few students to create a meaningful talent shortfall at any given defense company. Not interacting with those companies, on the other hand, does materially reduce opportunity for the HMC students who want to do so.
- 5. Altering defense companies' behavior through indirect means is also extremely unlikely, given they exist primarily to meet the needs of the U.S. military. More to the point, foreign policy is set by the U.S. government, and not by individual defense companies. The U.S. Foreign Military Financing program allows defense companies to sell weapons and services directly to aid recipients, but the U.S. government can (and often does) ship weapons from its own stockpiles, which are later replenished through U.S. government orders.
- 6. The U.S. currently meets its defense needs without compulsory military service, and the defense sector competes for talent on the open market. Commenters noted that in the U.S. as a whole, and at HMC specifically, everyone is free to follow their own conscience when it comes to working on defense technology or serving in the military. Some community members cited low-stakes engagement with defense work at HMC as having been useful in hashing out their own ethical positions.
- 7. Even if some or all of the HMC community were to opt out, commenters pointed out the national security interests of the U.S. suggest that defense work will still get done. HMC's mission is to produce technical leaders who are well equipped to ask and answer difficult questions about how technology will be used. It's not clear that abdicating

leadership in the defense industry to people without such sensibilities would improve matters.

- 8. The defense industry is usually called "aerospace and defense" because the companies doing the work often have a competitive advantage at designing systems for atmospheric and space flight. They apply that skill to deliver missiles and fighter jets, but also commercial and scientific satellites, interplanetary probes, and passenger jets. We have heard from several students that they came here specifically to do aerospace work. From the time they enrolled through the present, HMC has been an excellent place to pursue such a career. Cutting ties with aerospace companies would dramatically change that picture, and prospective students would need to be informed in advance, rather than in arrears.
- 9. Some members of the HMC community object not only to bona fide defense companies, but to other companies they identify to be part of a "military-industrial complex". The broadest interpretation of this objection would make any company that contributes to defense ineligible to partner with HMC. Given the highly interconnected global economy, this binary classification would forbid work with companies supplying everything from steel to business software to advanced electronics. Commenters argued it is not unethical to work with all such companies, even when the tools they make could ultimately be used in harmful ways. Complicity, they suggest, does not extend undiminished up the supply chain.
- 10. The National Association of Colleges and Employers (NACE), the professional organization governing career services in higher education followed by HMC's OCS, has a <u>code of ethics</u> that requires professionals to provide "equitable services to all constituencies." A <u>case study</u> specifically states that barring specific employers from recruiting in response to protests is generally considered to be a violation of that professional code of ethics.

Arguments For Institutional Neutrality

Some HMC community members have advocated for "institutional neutrality." This phrasing comes from the 1967 Kalven Committee report, a University of Chicago statement that has recently been revived as college presidents have been under pressure to make statements about current events or to ban speakers from college campuses because of their ideological positions.

Some commenters invoked "institutional neutrality" to push back against college stance-taking because an official statement from college leadership might have the effect of silencing or disempowering those with opposing views, particularly about HMC's ties to the military. They suggested the views of a vocal minority should not dictate the opportunities or opinions of the rest of the community.

The Kalven Committee report addressed similar concerns for the University of Chicago at a time when university leadership faced internal pressure to speak out against the Vietnam War. It

recommended the University of Chicago establish a policy of not issuing official statements on behalf of the university on political or social events, except when "[f]rom time to time instances will arise in which the society, or segments of it, threaten the very mission of the university and its values of free inquiry." The authors of the report argued that while it is the role in society of universities and colleges to "foste[r] the development of social and political values in a society," the proper "instrument of dissent and criticism" should be "the individual faculty member or the individual student." The institution in this light should be "the home and sponsor of critics; it is not itself the critic." In other words, by not asserting an institution-wide stance on some issue, faculty and student members of the university community will be empowered and free to opine and dissent on political and social issues without either repercussions from the university or concern that their ideas put them at odds with their intellectual community. According to the Kalven Committee, "A university, if it is to be true to its faith in intellectual inquiry, must embrace, be hospitable to, and encourage the widest diversity of views within its own community. It is a community but only for the limited, albeit great, purposes of teaching and research. It is not a club, it is not a trade association, it is not a lobby."

This spirit of encouraging civic engagement and dissent seems to be behind some of the comments from participants in our meetings, suggesting that people with different views should reasonably expect to find a supportive and open community at HMC for freedom of inquiry. Some faculty, staff, and students have described having their opinions met with hostility or disdain on campus, and some also feared retribution for holding and expressing opinions contrary to those of their supervisors, colleagues, or fellow students. It is clear from these comments that cultivating a campus climate in which open discussion, divergence of opinion, and free inquiry are encouraged and not punished, is both desirable and needed.

Arguments Against Institutional Neutrality

Other commenters noted the college adopting a policy of not issuing statements does not guarantee that a climate of openness and free inquiry will result. Survey results and comments from feedback meetings also suggest there is not consensus on whether or not it is the duty of our college to make public statements on pressing issues.

Given that only the President and the Chair of the Board of Trustees are authorized to make formal statements on behalf of Harvey Mudd College as an entity, participants also expressed a desire for transparency from college leadership about the reasoning behind why the college would or would not take a stand on any particular issue. Unfortunately, a policy of institutional neutrality, at least as described in the Kalven Committee report, is not much help in prompting college leadership to provide such transparency. The report offers little guidance for what the process would be to determine when and whether a college or university would make an exception to its own rules about public statements, except that it might do so when the issue at hand directly relates to education policy or academic freedom. The University of Chicago, for example, has made public statements, in the forms of legal briefs and press releases, since 1967, but they have generally not made public how the decisions to issue those statements have been made.

So, while the idea of institutional neutrality does affirm an image of the college or university as a facilitator and defender of free inquiry, academic freedom, intellectual ferment, and political and social value-making, there are some downsides to formally adopting it as a policy for HMC. Beyond what is discussed above, "institutional neutrality" does not acknowledge the many ways in which colleges and universities are formed with specific political, ideological, or social commitments in mind. By declaring itself neutral, the institution silences discussion around its own ideological underpinnings. Additionally, the current revival of interest in institutional neutrality is itself not entirely neutral; it stems from a particular political context, which has the potential to undermine trust in it as an operating principle for some of our community members.

These problems do not negate the real contribution the Kalven Committee report made in helping institutes of higher learning understand their responsibilities and duties in a free society to uphold free speech and encourage intellectual ferment. There is much that we can learn from and be inspired by in the report. However, these problems do suggest that we exercise caution before adopting such a policy at HMC.

A Clarification about Student Work on Clinic Projects

Several students and alumni have articulated they feel the Clinic program is inherently extractive, since HMC charges companies for student labor and students receive credit, but not compensation. Others argue this labor, even when directed toward projects that have little to do with defense, can be used to subsidize defense work occurring elsewhere in a company. This raises additional concerns about whether HMC is also profiting (albeit on a much smaller scale) from this work and whether students' labor is being exploited for profit by HMC. We think it is important to address these concerns because there are essential distinctions between Clinic and student employment.

At HMC, students are generally either paid or awarded academic credit for their work, but not both simultaneously. Summer research is paid, for example, while research on the same project during the school year is often done for credit. The Clinic and thesis capstone experiences are part of the curriculum, and are compensated with academic credit rather than money. As such, a significant focus of project-recruiting each year involves choosing projects that provide academically valuable experiences (exposing students to new technologies or industries, providing open-ended, intellectually challenging problems, etc.). Even in programs that combine education and employment at other institutions, such as co-ops, the related academic aspects of the program run parallel and separately from the employment aspects. The academic aspects can then be considered part of the curriculum and the employment aspects still fall within relevant legal structures governing employment.

In the feedback the Task Force received, we also heard from some alumni liaisons (past and present) and former Clinic directors about the less-visible expenses the sponsoring companies shoulder for running Clinics. Companies pay a significant amount of money up front to sponsor Clinics, but the total cost is often much higher when the liaison's time and travel are included. Many liaisons choose to serve out of a personal desire to mentor the next generation of talent, not because it improves the sponsor's bottom line.

What We Recommend

Individuals at HMC should be empowered to express, follow, and develop their own ethical beliefs, choosing the projects and employers that excite them while avoiding and raising concerns about others. This open discussion and freedom of choice is critical to HMC's mission to develop leaders who are equipped to understand the impact of their work on society. The selection of projects and employers that HMC recruits should, to the maximum extent possible, reflect the broad interests of our community while also being consistent with curricular goals. Both of these recommendations are discussed in detail elsewhere in this report.

As discussed in the first interim report, there are no universally agreed-upon metrics to categorize companies as 'defense companies'. We recommend the fraction of Clinic projects solicited from *all* companies to continue to float in response to their alignment with Clinic's overall curricular goals, the quality of the experience provided, and student, faculty, and staff interest. We do not recommend a policy prohibiting engagement with specific industries or companies, including companies that do defense work or their suppliers. However, we do recommend codifying the long-standing practice of not accepting Clinic projects that work directly on weapons or are classified.

The mandate of the Task Force is not to express an opinion on whether Hamas, Hezbollah, Israel, Iran, or the U.S. are behaving ethically in the current conflict, and we are not electing to do so here. We are also not condemning or supporting any individuals or groups on campus that have advocated publicly or privately on either side of this issue.

We have been charged with evaluating the merits of a concrete proposal to disengage with the defense industry and several non-defense companies. That proposal suggests that defense work is either inherently unethical, or that it should be avoided as an act of protest. Many members of the HMC community, having considered these arguments, still want to work with the companies in question. We believe HMC should continue to offer these opportunities in aerospace, software, technology, and defense, even as it works to expand opportunities in other areas.

Although we do not recommend disengagement with entire industries or companies, the Ombuds recommended elsewhere in this report would be available as a resource for Clinic directors and other members of the HMC community in evaluating the ethical implications of individual Clinic projects. Further, by formalizing students' long standing rights to conscientiously object to participating in specific Clinic projects, individuals will retain the autonomy to align their work at HMC with their own ethical positions.

We recommend that OCS continue to follow professional best practices and adhere to the NACE code of ethics, providing equitable services to all constituencies, including companies that do defense work and students interested in defense work. A companion recommendation that Clinic and OCS continue working to diversify their offerings is detailed elsewhere in this report.

The Task Force strongly believes that HMC should be a community where faculty, students, staff, and alumni with diverse views can engage in open discussion and freely express dissent. To that end, we recommend the President and the Chair of the Board of Trustees continue to use the institutional voice of Harvey Mudd College judiciously, with a focus on matters that relate to carrying out our educational mission. We recommend that any policies guiding decisions to make public statements on political and social issues be made transparent to the community. When possible, we recommend that members of multiple campus constituencies be consulted in advance of public statements. Because the term "institutional neutrality" carries significant baggage, for reasons discussed above, we do not recommend an explicit commitment to a policy of institutional neutrality.

3.0 Academic Departments are the Locus for Conversations about Capstone Goals and Pathways

What We Heard

All stakeholder groups appreciate that decisions about the curricular aspects of Clinic and student capstones rest solely with the faculty. From discussions with department chairs and Clinic directors, it is clear that each academic department has a distinctive vision for how the capstone experience meets the department's learning objectives and fits into the broader context of students' HMC education. With fewer budget and staffing constraints, many want the opportunity to dream big about what the capstone could become. At the same time, the Task Force heard concerns about forcing departments into models that do not work for their discipline and their learning objectives. Other comments reinforced the need for the departments to learn from each other and from other peer institutions as they examine their own practices and innovate for the future. Several respondents expressed they were not aware of the learning objectives for the capstone experience at HMC or these objectives were not sufficiently clear to them. Given the importance of clearly articulated learning outcomes for successful program design and evaluation, we recommend this to be done early in the process for any capstone re-affirmation or re-envisioning.

What We Recommend

- We recommend the Dean of Faculty explore options for providing resources to academic departments that want to engage in conversations and reflection on their intended learning outcomes for capstone projects and how best to meet these.
 - Departments own their disciplines' curricula, including their capstone programs and the associated learning objectives. For departments that are interested, we encourage discussion on innovative curricular pathways that enhance the capstone experience.
 - Departmental reflections on capstone experiences are time and labor intensive.
 Examples of resources to support this process include retreat funding, an external facilitator, and/or salary support to an organizer or coordinator.
 Departments will also require resources to act on any changes they decide to make (e.g., professional development on how to mentor Clinic teams if a non-Clinic department decides to try Clinic, or funding for an interdisciplinary pilot capstone).
 - In addition to promoting curricular innovation, articulating clear capstone learning outcomes can help faculty see how capstone programs could interact with their scholarship.

- 2. We recommend the Faculty Executive Committee (FEC) explore ways for departments to share different capstone models at the college (e.g. Clinics of all flavors, thesis), what their learning outcomes are, and how they operate.
 - This recommendation could be taken up in multiple ways, but we are basing this suggestion on the previous interdepartmental "Connections Across the Core" program (also known as Core-palooza) organized by the 2012-2013 Teaching and Learning Committee. For capstone projects, we imagine that a similar faculty workshop around Capstone discussions would be valuable to faculty across the college, including those not in Clinic-hosting departments. This workshop would promote greater understanding of how our capstone experiences build on our curriculum, and how Capstones relate to the departmental learning goals that give shape to the majors. Providing faculty the opportunity to share and learn from each other across departments also may provide them with ideas for innovating their own department's capstone experiences.
 - A workshop could be combined with other programming, such as events hosting faculty from peer institutions to learn about the different models for capstone experiences in their curricula or connections to outside groups such as the Capstone Design Community (https://capstonedesign.community.org/).
 - A Capstone Guide summarizing the results of these cross-departmental conversations could help students to better understand how the available capstone experiences may align with their own educational goals.
- 3. We encourage departments to be in regular conversation with peer institutions, so HMC faculty can be well-informed of emerging models and practices for capstone experiences, and so that other institutions can continue to benefit from HMC's innovation in the Clinic program.
 - The peer institution exploration conducted during the Task Force process (see the Task Force's First Interim Report pp. 3-12) should not be a one-time event. We recommend institutional support for sustaining this process, such as faculty professional development, encouraging faculty to engage with the broader capstone design community and supporting faculty who want to do educational research in these areas.
- 4. We encourage departments to include their capstone as a focus when undergoing external program review.
 - Departments regularly undergo external reviews and accreditation processes
 which often include assessment of capstone experiences. These external
 reviews are another opportunity to promote regular self-evaluation and external
 feedback on capstone experiences. If they do not do so already, we encourage
 departments to prioritize evaluation of capstone experiences in their regular
 external reviews.

- We also encourage prioritizing the assessment of capstone experiences in the college-wide accreditation and review processes coordinated by the Office of Institutional Research and Effectiveness (OIRE).
- 5. We recommend that departments and the Department Chairs Committee (DCC) consider how capstone project mentoring and informal technical consultations may be counted toward teaching credit, and to assess the faculty staffing needed to support capstone projects.
 - Capstone operations are constrained by staffing needs in their home departments.
 Departments and the college should explore opportunities enabled by alternate models and the staffing that would be needed to support them, such as more faculty specifically for Clinic/capstone and/or consolidated models where not everyone advises a project.
 - We encourage the college to explore ways to facilitate and recognize technical consultations across departments. These are invaluable for sustaining the Clinic and thesis programs, building bridges between departments, and supporting faculty who supervise capstone.

4.0 Create a Model for Career Development that Spans All Four Years and Prepares Students with Lifelong Skills

What We Heard

During meetings and in comments on the summer survey, most comments about the Office of Career Services (OCS) focused on wanting more diversity of employment opportunities and diversity in the types of companies who recruit at HMC. Some students expressed they felt they were being funneled into a certain career path or pushed towards particular industries because of the limited participation of companies in career fairs and other HMC-focused recruiting. They were concerned that participants at the career fair or corporations recruiting on campus may not reflect the interest of all students. Many asked what plans are in place for expanding offerings, including a few questions about how OCS might help students interested in working for non-profit organizations or start-ups make connections. Others wanted more information about how OCS might serve students and alumni interested in careers in medical research, biotech, or other industries that are less visible on campus.

Comments also included praise for OCS for seeking student input on programming and offerings, and others offered suggestions for how alumni and others might work with OCS and help to make connections with companies hoping to hire HMC students and alumni.

One thing Task Force members were struck by in reading through comments was how many of them focused on concerns about diversity at the career fair specifically, and how little was said about other aspects of the resources available through OCS. This imbalance of attention might have several causes: student concern over career prospects, communication issues, lack of general understanding about career services, the Task Force's own focus on career fairs as quantifiable data in previous reporting, or other factors. It did, however, cause us to reflect on what people expected from OCS currently, and how that compared with what the wider field of career services can offer students and alumni.

It also caused us to start thinking about how this current focus on OCS might be an opportunity to engage the community in re-envisioning career services at HMC, as a more comprehensive set of best practices and programming that addresses multiple aspects of the student's professional journey, including self-discovery, career planning, and personal goal-setting early on in the student's time at Mudd. An example of this programming currently exists in the Engineering Department's "Prototyping Your Mudd" one-credit course as a reflective, design-based method for self-discovery and academic planning. As students progress in their studies and gain a better understanding of what interests them, programming should focus on the skills needed to obtain and thrive in roles that align with their interests.

When we focus on career readiness, students become more empowered and equipped to seek and obtain a purposeful career path, which enables them to be lifelong stewards of their career journey.

What We Recommend

The recommendations below are aimed at re-envisioning career services at HMC, and thinking together about how to empower students with skills and experiences that prepare them for long-term career success by more fully integrating career exploration and development into the four-year experience at Mudd.

- We recommend OCS be rebranded and reshaped to reflect a more comprehensive approach to personal and professional development, and a commitment to helping students become stewards of their own career journey now and for the future.
 - While the office works to better diversify its connections and partnerships, it is important to think about what we can do to foster the professional development of our students starting the first year and continuing through their senior year. Literature suggests there are eight career-ready competencies: career and self-development, communication, critical thinking, equity and inclusion, leadership, professionalism, teamwork, and technology. While these are all covered in some fashion throughout a student's curricular and co-curricular experience over four years, the parallels to the job market are not sufficiently clear for all students to capitalize on these facets of their education.
 - Career services at HMC needs to provide skill-building resources to reflect new trends in finding and hiring for jobs and internships. Historically, students have relied heavily on career fairs to find jobs and internships. Nationally, employer participation in on-campus fairs has dropped significantly since the outbreak of COVID-19, and even current employers at career fairs provide scan codes for student attendees to apply online.
 - Funding should be allocated from the college to renovate the OCS office, creating welcoming spaces for students to work in groups and conduct confidential meetings. The OCS space should also be inviting for employers who visit and wish to meet with students while on campus.
 - Funding should also be allocated to update and supplement technology and resources that can be easily accessed and navigated by students, alumni and employers. These resources should include a resource-rich website, assessment software, and viable platforms for connecting students and employers.
- 2. We recommend OCS create developmentally appropriate four-year programming for personal and professional development.
 - First and second-year programming should focus on self-assessment/discovery and basic skills development and could potentially offer a course for college credit or a badge/reward system to encourage participation.

- Third- and fourth-year programming should build on first and second-year programming independently or in partnership with the academic departments.
- OCS should leverage the HMC alumni and parent community to expand opportunities for all students to explore careers through events, networking, mentorship, internships, and job shadow experiences.

3. We recommend the college ensure adequate staff resources and training in OCS

- Staffing the career office sufficiently and appropriately for the proposed programming will be resource intensive. It will take significant work and time to increase the breadth of offerings in a wide range of fields to ensure access to resources that align with student interests and help them to think more expansively about their career possibilities.
- The college should also consider hiring staff with expertise in specialized areas of career services, such as counseling students interested in pursuing graduate studies or creating first-year programming.
- The college should also provide funding to support staff training and professional development in areas of specialization to best deploy new programming.

4. We recommend OCS engages faculty to incorporate career exploration in courses and to promote career development opportunities with advisees.

- Faculty may be encouraged through small grants to rework courses to include site visits, guest speakers, etc.
- OCS should partner with faculty in each department to improve how to share opportunities and events with students.

5.0 Building Capacity for Ethical Engagement

Ethics and its related terms carry a variety of meanings, often shaped by the context and the background of the individuals using them. Throughout this process, we have observed that different constituencies approach and interpret these terms in ways that reflect their unique perspectives and needs. In this report, we have aimed to use the term "ethics" in alignment with its definition as the moral principles that guide behavior or activity. However, we acknowledge that our usage of the term may be at times imprecise and may be interpreted differently depending on the reader's context.

What We Heard

At its best, the College aspires to bring together people with diverse views on a wide variety of topics and encourage curiosity, reflection, and constructive dialogue to equip students with the tools to form a "clear understanding of the impact of their work on society" per Harvey Mudd's mission statement. Implicit in the mission statement is also the goal of equipping and empowering students to take informed and ethical action in response to what they understand this impact to be.

What we heard from many community members in the fall discussions, however, was an overall sense that the college could do more to further its explicit and implicit goals around ethical education. Participants highlighted opportunities to expand ethical engagement in coursework, capstones, and more broadly as an institution.

Comments in the survey generally supported exploring ways to increase curricular, co-curricular, and professional development opportunities for HMC community members in ethics, ethical decision-making, and constructive dialogue. Some of the strongest support expressed was for offering more intentional and sustained ethics education for students, as well as continuing to explore impact-focused courses. Some commenters were enthusiastic about a possible Core ethics course or the development of "ethics units" like the one recently offered by Prof. Darryl Wright for Clinic students. A few others tempered their enthusiasm with caution, wary of adding to the curriculum without first considering what might need to be subtracted from it; decisions about whether to adopt new courses or units will need to weigh pedagogical goals and priorities, and existing workload.

Many meeting participants also wondered and worried about how decisions on ethical issues would be made in the future at HMC, without flattening important nuance or imposing some moral position on the rest of the community. Some suggested the creation of an ethical framework or code applicable to Clinic projects and sponsors. A few did not find such a code either practical or advisable, arguing that creating one would be expensive, take a long time, and be highly controversial. We also heard strongly that students should be taught to think critically for themselves rather than requiring they, or anyone at HMC, adopt a set of college-endorsed ethical principles. Others worried about adopting an inflexible set of standards or rules which might look good on paper, but wouldn't offer real guidance for how to assess the social impact of specific Clinic projects or the ethical implications of working with particular

companies or industry partners. If such a code was established, there is also the question of who would vet projects for Clinic, and how a project's technical merits would be weighed against its potential social impact. Still others were concerned that one group's standards of what is ethical would be enforced through this code on others who have different standards, which might have the additional effect of limiting students' choices for what projects they could work on.

In addition to clearly articulated practices for making ethical decisions on individual projects, commenters asked for formal ways for the voices of students, faculty, and ethics professionals to be incorporated into decision-making. Some suggested that an internal board or committee could either assume responsibility for such decisions, or provide consultation to Clinic directors as they recruit sponsors. Nearly everyone with direct experience in soliciting projects felt that this was impractical, and suggested that existing departmental best practices are a sufficient guide for Clinic directors. The Task Force ultimately opted to address both sets of concerns through a more streamlined solution. As described below, we recommend that departments articulate their existing best practices around project selection, and we recommend hiring an Ombuds who could both assist in assembling these documents and mediating community concerns.

A wider set of issues also surfaced relating to cultivating corporate partnerships. Some respondents stressed that HMC should ensure both students and Clinic partners have an experience worthy of Harvey Mudd's reputation for excellence in STEM. Others wondered how HMC could leverage the expertise and connections of alumni in order to learn from them about ethical issues they encountered in their professions and provide more opportunities for students to work on innovative projects or secure jobs.

In summary, what we heard was HMC has work to do to increase community members' ability to communicate with and learn from each other, to build up our skills in reasoning and critical thinking, and to make ethical education widely available for the HMC community so that students rigorously evaluate their understanding of the impact of their work on society as part of their capstone experiences.

What We Recommend

- Because of the interest that we heard for incorporating more impact and ethics-related content to our curriculum, we recommend the Faculty Executive Committee (FEC) appoint a one- to two-year ad hoc Impact and Ethics in the Curriculum Committee. This committee would be charged with exploring faculty interest in and ideas for creating a culture of constructive dialogue on impact and ethics within the curriculum and co-curriculum.
 - We are recommending a faculty committee to do this work not because we have expectations about what the committee will find or recommend, but because

potential college-wide curricular changes have historically been studied and guided through a faculty-run process.

- The committee may choose to focus its work in a variety of ways.
 - It may research courses and ethical education programming at other institutions;
 - Explore options for cross-departmental and cross-institution collaborations to address complex issues related to ethics and impact through interdisciplinary projects and research;
 - Evaluate the funding and resources necessary for any initiatives including joint initiatives, which might include course development grants, support for mini-conferences around current events, or temporary (or ideally permanent) faculty hires to supplement departmental teaching when faculty members from different departments co-teach interdisciplinary courses;
 - Explore ways to expand professional development opportunities for faculty and staff in ethical decision-making, constructive dialogue, and ethics- and justice-focused pedagogies, so that they are better equipped to engage with students and colleagues who may seek them out.
- The committee should consult with the Core Curriculum Director, Clinic Directors, and departments, and bring their findings to the rest of the faculty for consideration of possible next steps.
- 2. We recommend that the college support Clinic-hosting departments in developing "best practices" documents, which put into writing policies that already exist and articulate ethical guidelines for developing corporate relationships.
 - As many of our respondents rightly pointed out, the work of creating ethical guidelines can be resource intensive, and can include consultation with experts, opportunities for community discussion, and dedication of considerable faculty and staff time, among other things.
 - Clinic-hosting departments and Clinic directors have also developed sets of best practices over the years, which could be put into writing and shared with both interested community members and with corporate partners.
 - Departments will have their own sense of how this work can be most effectively done, and their own pedagogical criteria for Clinic projects. We believe that this work is best done at the departmental level.
 - The college could support this work by providing funding for departmental retreats, course releases for those working on these documents, additional staff

- support to allow staff members with expertise to participate, and compensation for experts, among other ways.
- Student involvement in the process of creating such ethical guidelines/best practices documents could leverage existing departmental student advisory committees, student governance through ASHMC or the Senate, or inviting students to participate in other ways.
- We highly recommend the college hire an Ombuds to help departments as they
 develop best practices documents/guidelines and to help community members
 express concerns and resolve disputes with respect to Clinic and corporate
 sponsors.
 - A college Ombuds serves as an independent, third-party advocate, mediator, and resource for all students, faculty, staff and administrators. They operate independently of other college departments and the administration and the administration, but are knowledgeable about college policies and procedures. They are available to help all on campus navigate existing channels for resolving conflicts, and assist in developing alternatives for addressing concerns.
 - Beyond mediation, Ombuds also can serve other important functions for an institution, such as participating in reviews of policies, programs, and other aspects of an organization, to gather feedback from stakeholders, identify potential concerns or areas for improvement within the organization, and foster consistency between organizational values and actions. Their training in facilitating open communication will help ensure that all voices are heard in these processes, particularly for those who are hesitant to speak up through traditional channels.
 - An Ombuds can also help provide conflict resolution skills training; restore fractured relationships between community members by helping them communicate better; improve the inclusivity of campus culture; identify areas of concern for campus leadership; and help address some of the subtle forms of insensitivity and unfairness that may not rise to the level of a formal complaint, but nonetheless undermine community members' trust and sense of belonging.
 - Students would be encouraged to visit the Ombuds to discuss problems or complaints related to life at HMC with an independent and confidential resource.
 The Ombuds could provide guidance on next steps, offer information about HMC policies and processes, and help identify other resources within the community.
 Students could also revisit unresolved issues to explore alternative solutions.

6.0 Cultivate Community and Institutional Relationships to Enrich Student Learning

What We Heard

Diversifying the projects offered through Clinic and the employers that work with OCS was perhaps the single most common request we heard. Although portions of the HMC community want to see targeted disengagement with certain industries, including defense, finance, technology, and advertising, a much larger slice of the community simply wants to see more options that better align with their interests. Popular requests included more companies working on biotechnology, mechanical engineering, chemistry, and climate technology. Students were also keen to work with start-ups, especially those founded by Mudd alumni. Non-governmental organizations (NGOs), non-profits, and public policy think tanks were also frequently cited as potential ways for students to pursue social good in their work.

Enterprising faculty members have also experimented with courses that emphasize community connections and service learning, but that present significant logistical challenges. For example, Prof. Paul Steinberg's popular *Bicycle Revolution*, in which students cycle to meet with community leaders about implementing bicycle-friendly policies, is an impactful and popular course that is extremely time-consuming to organize. Additional staff support for similar service learning courses could ease the path to offering these courses more regularly and to developing new ones, particularly for faculty in departments with less administrative support. HMC's Office of Civic and Community Engagement (OCCE) is a natural ally and resource for expanding HMC's landscape of community-sought/community-sourced projects.

What We Recommend

- 1. We recommend the college expand the Office of Civic and Community Engagement (OCCE) to support faculty and staff members offering community service projects and service learning opportunities.
 - Students participating in such community-facing courses or projects work with external stakeholders, navigate institutional structures, and experience the bridge-building between coursework principles and operational practice.
 - As noted, connecting with community partners and arranging logistics for students to take part in service learning/community-service courses require time and effort. With appropriate resources, OCCE can partner with faculty in making and sustaining these exciting connections, while continuing to serve as a sounding board and as a hub for community engagement.
- 2. We recommend the college support a variety of Clinic/capstone projects that meet departmental curricular goals and align with student, faculty, and staff interests.

Among other possibilities, these could include community-sourced projects and projects with non-profits, start-ups, and underrepresented industries.

- In response to the changing interests of the HMC community and larger-scale trends over the past decades, the projects offered through the HMC Clinic program have changed significantly. This recommendation seeks openness to the possibility that this pace of change may continue or increase while highlighting the years of effort already expended by faculty and staff to continually improve, expand, and refine the program to meet each era's needs.
- Recruiting, vetting, and supporting a new "style" of capstone project can be more labor-intensive than running privately sponsored projects, e.g., requiring new legal documentation/memorandums of understanding, new funding pathways, new collaborative structures, or other novel alliance-building. We recommend investing in additional Clinic and OCS resources to create capacity to pursue such opportunities. As one example, when and if appropriate, we recommend pursuing endowed funding and external grants for a small number of unfunded or underfunded Clinics.
- In all cases whether non-profit, commercial, or governmental value is often created through personal connections, <u>especially</u> when those connections and collaborations can build beyond the span of a single year's effort. Pursuing such paths would require the investment of staff and faculty members excited for the mutual benefit of these relationships. Where departments see such opportunities, the Task Force welcomes and encourages them. In such cases, the Task Force recommends supporting such relationships with a project-specific balance of departmental and institutional support.
- The Task Force has heard feedback of instances in which non-profit organizations have expressed interest in working with HMC but lack the internal resources to provide a technical liaison or are otherwise unable to support a project with the technical investment required by the Clinic program. Additional funds or external grants, some of which could flow to the sponsoring organization, might make such projects more viable. We might also explore partnering with alumni to serve as technical advisors for non-profit Clinics.
- 3. We recommend OCS be provided with extra support staff in order to expand opportunities related to biotechnology, climate solutions, and other industries currently underrepresented and sought by a sizable student cohort.
 - There are too many industries for OCS to maintain proactive portfolios on each.
 With additional support, it would be possible to select a targeted subset of 2-3
 industries per year, chosen via OCS's existing programs for HMC and 5C
 feedback. Those industries would be proactively pursued, with results shared
 community-wide at the end of the year's recruiting cycle.

- This effort would include hosting community conversations to identify fields of interest – and tapping alums who wish to help current students build insight and exposure to such fields.
- 4. As part of the College's engagement with industry communities, we recommend that OCS and OSRP collaborate to form an external advisory committee to provide insight on trends in their industries, including R&D, hiring, and macroeconomic factors affecting their industries.
 - External advisory committee members will be expected to leverage their networks to introduce potential Clinic partners and employers. An active committee will expand the reach of the Clinic program and OCS with new and varied non-profit, governmental and social-justice-driven stakeholders in addition to expanding relationships in areas of interest for HMC students.
 - Involving former and current Clinic liaisons, employers and institutional partners brings diverse perspectives from across industries, allowing the program to stay up-to-date with real-world needs, trends, and innovations. The external advisory committees can offer strategic advice on how to promote Clinic's educational objectives through industry engagements in ways that maintain the program's integrity, core values, and evolving student interests.
 - The advisory committee membership can be formed with the intent of supporting partnerships in industries where student interest is high, but have traditionally not been as engaged with Clinic or OCS. This can be driven in part by student interests as identified in the Task Force survey, as well as through regular surveys to students from OCS and OSRP.
 - The joint OCS/OSRP committee will have a college-wide focus. It should coordinate with the Engineering department on a collaborative approach to support and enhance the work of the Engineering Visitors Committee, which delivers regular feedback to the department on topics including industry engagements and capstones, and minimize duplication of effort.
 - For instance, if feasible, a member (or two) of the Engineering Visitors
 Committee could be invited to join the external advisory committee to help facilitate communication between the two groups.
 - Collaborating on the external advisory committee will reinforce the partnership between OCS and Clinic to better serve the students' interests in both Clinic and recruiting.

7.0 Affirm and Support Student Agency

What We Heard

Students want to be more active and informed participants in multiple aspects of the Clinic experience and in their interactions with OCS. Comments about student agency covered a range of topics, from wanting improved communication and transparency about possible employers, Clinic projects and partners, to wanting clearer pathways for proposing Clinic projects themselves, or making connections with industry or non-profit organizations who might wish to sponsor Clinics or recruit at HMC. Alongside these comments and suggestions, students clearly expressed the sentiment they did not wish to work on Clinic teams sponsored by organizations or corporations whose work is not aligned with their values, personal goals, or moral principles.

Current and past Clinic directors explained that teams are generally selected by an opt-in process, rather than an opt-out process. Students are free to rank or not rank any project for any reason, and it is nearly always possible to place students on one of the projects they ranked. In cases where this is not feasible, faculty generally have one-on-one conversations with the affected students to find a mutually acceptable solution. In the summer survey from the Task Force, a significant majority of the respondents across constituencies feel strongly that students with ethical objections to a Clinic project or its sponsor should not be required to work on that project, consistent with current practice. In meetings, a few alumni described landing on Clinic projects to which they ultimately had ethical objections. Some reported having those objections from the outset, arguing that fewer than the required number of preference submissions aligned with their values and professional goals during the selection process. A larger group developed ethical concerns over the course of the project, and lamented the difficulty inherent in switching projects mid-semester. In either case, support for developing positive paths forward for students in difficult situations would be welcome. At the same time, the Task Force fully appreciates the difficulty inherent to a matching problem with so many constraints, and we recognize that it will rarely be possible to give every student their top choice.

We also want to affirm the very real support we heard from across HMC constituency groups for both the Clinic program and OCS. Community members expressed pride in our Clinic program, enthusiasm for thinking about the expansion of opportunities in OCS, and excitement for participating in the improvement of both.

In related discussions, students and other participants were also eager to think about how projects and companies might be assessed for their social impact or ethical practices, and how student concerns or complaints might be handled if some significant ethical objection arose to working with them. Some wanted more information ahead of Clinic selection, job fairs, or other events bringing partner organizations and companies to campus, so they could make better choices for themselves, and others wondered about setting up possible means for lodging a complaint or challenging the inclusion of an organization that seemed objectionable.

Students expressed desire to pursue activism and advocacy in various ways. Members of the HMC community who wish to engage in this important work should find that HMC provides support, encouragement, and resources to help them be as effective as possible. Commenters suggested that activists generally exert far more influence when they have a deep understanding of the arguments for and against their positions and actively work to build connections with the people making policy decisions.

What We Recommend

- 1. Clinic-hosting departments should formalize and communicate their existing practice of allowing students to opt in to Clinic projects that interest them, and to avoid projects to which they object without requiring justification.
 - Existing procedures in Clinic-hosting departments allow students to opt in to
 projects that interest them by ranking them on a preference form. Students can
 implicitly opt out of projects they would not want to be assigned to by not ranking
 those projects. These procedures are intended to take the ethical standards of
 each student into account and ensure, as much as possible, that students can
 fully engage in the Clinic program without compromising their values.
 - This practice does not guarantee that every student will be assigned to their absolute top choice of Clinic project or team, but it does reduce the chance that a student will end up working for a sponsoring company or on a project to which they object strongly.
- 2. We recommend the college hire an Ombuds who can act as an advocate, mediator and resource for all students and others wishing to raise concerns with respect to Clinic and corporate partnerships.
 - Ombuds serve multiple roles in organizations. They can serve as an advocate and mediator for all students, employees, and other members of academic institutions.
 - For students uncomfortable with confronting a professor who is responsible for their grade or anyone intimidated by the power differential between themselves and the person they might want to bring a complaint to, Ombuds can be particularly useful. They are neutral parties who are knowledgeable about and advocate for fair and equitable processes.
 - Students (and others) can bring their concerns to an Ombuds at any point to resolve an issue, receive feedback, strategize about options, or talk things through confidentially with an impartial party. All communications with Ombuds are confidential and privileged, except when there is an imminent risk of harm. Ombuds do not keep formal records of their conversations.

- In the case of Clinic and corporate partnerships, students may be more likely to voice their concerns with a professor, administrator, or Clinic liaison when they have the support of an Ombuds, who will work to make sure their ideas are fairly presented. Additionally, when a student's understanding of college policies and procedures may be limited, having a knowledgeable person such as an Ombuds to act as a sounding board for their ideas may also give them the confidence to engage others in creating the change they want to see.
- 3. We recommend OCS continue to assess and diversify its offerings and programming to align with the broad array of interests from students.
 - We have presented recommendations for reenvisioning OCS in <u>Section 4</u>. Many of those recommendations address students' expressed desire for more diversity of offerings in OCS and more guidance in identifying fulfilling career paths.
- 4. We recommend that the college support Clinic directors and OCS staff in exploring ways to increase students' confidence, capabilities, and comfort with researching and deciding on industry/organizational partnerships they wish to engage with.
 - This recommendation recognizes the importance of the process of informing oneself about a potential project and/or potential organizational partner. It is neither possible nor appropriate to shift the responsibility for making well-informed decisions away from each student individually.
 - We thus ask the college to enable, if and as sought by Clinic and OCS, student-supporting interventions that might include
 - Asking Clinic sponsors to provide a short "Impact Statement" about their project and then sharing that statement, along with its context, with the students.
 - Developing or expanding existing experiences, e.g., pre-Clinic gatherings and pre-Clinic curriculum, that help students consider and practice the skill of carefully researching how potential projects align with their goals, values, and interests.
 - Alternative or additional programming that Clinic directors/OCS staff feel could help students make well-informed choices about companies and projects they might pursue in Clinic, in internships, in their careers, and elsewhere.
 - To be clear, this recommendation seeks college resources that enable Clinic and OCS directors to implement the programmatic emphases *they seek* for supporting their students' well-informed, individual decision making.

- 5. Provide funding for interested members of the HMC community to engage in professional development around activism and network with policymakers.
 - HMC equips students to understand complex issues and clearly communicate
 their perspectives. We recommend exploring curricular and co-curricular
 opportunities to build on our strengths and help interested students, faculty, and
 staff to learn strategies for engaging in effective activism through dialogue with
 the parties responsible for policies they would like to change or enact.
 - On campus, these opportunities could include training offered through Office of Civic and Community Engagement (OCCE) and the Office of Institutional Diversity (OID), possibly in partnership with existing ASHMC-sponsored groups like People Respecting Identities and Sexualities at Mudd (PRISM), Black Lives at Mudd (BLAM), and Engineers for a Sustainable World (ESW). Invited speakers who have led protest movements or successfully lobbied for policy changes could discuss their experiences.
 - Off campus, it could mean support for student and faculty travel to meet with local, state, and federal policymakers. Students and faculty interested in advocacy that stems from their research might benefit from national programs like the Council on Undergraduate Research's Scholars Transforming through Research program.

8.0 Create Budget Flexibility for Departments to Pursue Creative Capstones

What We Heard

In the Task Force survey, respondents from all groups expressed a desire to diversify the Clinic project portfolio. Specific interests included working with start-ups, non-profits, and local, national, and international community organizations. Often these organizations are not able to pay the full Clinic fee. In addition, community members familiar with Clinic finances noted that a variety of external factors can lead to year-to-year fluctuations in the availability of full-paying Clinics, which can put stress on budgets supported by Clinic.

The College and Clinic-hosting departments currently rely upon revenue generated by Clinic fees to support their programs. As noted in the first interim report from the Task Force, the Clinic fees in 2023-2024 generated \$2.3 million of revenue, most of which funds important programs directly and indirectly related to Clinic. Annual targets for the number of Clinic projects hosted and the revenue raised present challenges in recruiting sponsors that may not be able to afford the full fee.

At present, 31.5% of Clinic program revenues flow to the College operating budget to cover indirect costs incurred through the use of shared resources like buildings, computers, electricity, and non-departmental staff time spent in support of the program. The remaining 68.5% of Clinic revenue is allocated to the department hosting the Clinic project. Departments allocate this money differently, but each department uses Clinic revenue to support staff who run the program. Clinic funds have also historically supported longer-term investments in Clinic capabilities, including improvements to machine shops, equipment, and Clinic spaces. Clinic funding also supports the student experience (e.g., through peer support in pre-Clinic classes) and faculty development. During fall meetings, community members expressed fears about potential cuts to staff positions and College-wide resources currently supported by Clinic if the revenue amounts or allocations were to change significantly. Community members also expressed concerns about Clinic fees being used to subsidize non-Clinic programs.

What We Recommend

For the Clinic program to be accessible to a broader array of sponsor organizations and to promote variety in the project slate each year, both the fees paid by individual projects and the overall Clinic program revenue targets need more flexibility.

More slack should be created in departmental budgets by raising additional funds, whether to support Clinic projects directly, or to support programs and resources that are currently funded using Clinic revenue. Funding the equivalent of even a few Clinic projects per year, either operationally or through a permanent endowment, would free departments to explore more reduced-fee or no-fee Clinic projects at their discretion. Funding a single Clinic project for a single year currently costs \$60K, while endowing this cost in perpetuity using the College's 4%

return assumption would cost \$60K/4% = \$1.5M. These are big numbers, but supporting exciting new types of projects, not to mention wildly popular programs like CS grutoring or the machine shop, is likely to appeal to donors.

For any new funds to create real flexibility, it's important to preserve the autonomy that departments enjoy in allocating their own budgets. To that end, we also recommend that the Office of Business Affairs (BAO), the Office of Sponsored Research and Projects (OSRP), and the Clinic-hosting departments collaborate to build a new model for how Clinic fees are budgeted, collected and allocated. This model should:

- 1. To the extent possible and where advisable, decouple fixed operational expenses, especially staff salaries, from Clinic revenue.
 - To provide flexibility in annual revenue targets, known and fixed operational costs, including staff salaries, should be decoupled from Clinic revenue by fully supporting these positions through the College operating budget where appropriate. Any revised approach to revenue needs to:
 - Ensure that departments can cover operating costs that vary by project such as equipment and travel.
 - Accommodate unpaid or reduced-fee projects.
 - Support department infrastructure (e.g., spaces, equipment) that sustains Clinic capabilities.
 - Upgrades to and upkeep of Clinic infrastructure are particularly challenging to achieve from funding sources other than department-controlled fee revenue since departments best understand the spaces and resources they need to attract and successfully perform Clinic projects. HMC must also continue to provide adequate compensation and enough institutional support to make running Clinic feasible for faculty and staff. Some operating costs, such as OSRP staff and the budget for recruiting travel and liaison interactions, are already decoupled from Clinic revenue and as a result are less of a focus for this recommendation.
- 2. Explore, enact, and extend funding models for start-ups, nonprofits, and smaller companies through a differentiated fee structure.
 - Currently, ad hoc flexible fee structures are used to accommodate pro-bono projects, projects with fees covering supplies and travel only, and entrepreneurial projects with equity agreements. A more significant shift in revenue expectations is needed to extend our capacity for such differentiated-fee projects. The Entrepreneurship Initiative is already piloting alternative funding for projects in 2024-2025, and established endowments for Climate Clinic and Global Clinic offer another potential model.

 Capstone fees contribute to sponsor investment in their projects and represent a significant source of potential revenue, so they should not necessarily be eliminated for all projects.

3. Fundraise for college programs currently supported by Clinic fees to support expanding Clinic partnerships

- We recommend that college leadership, Advancement, and the Clinic departments fundraise to allow a more deliberate decoupling of Clinic expenses from other administrative and departmental purposes, including facilities with non-Clinic uses, student employment programs, and professional development. For example, the upcoming comprehensive campaign may offer opportunities to support (and even expand) college programs currently funded by Clinic fees. This fundraising should give departments more flexibility in funding non-Clinic or Clinic-adjacent academic programs that currently rely on Clinic fees, creating more latitude for departments to innovate around their capstone programs.
- The fundraising needs of non-Clinic departments must also be a central part of these efforts. Unfunded and underfunded needs across all departments and institutional divisions exist and should be addressed.
- The college's current model for relying on Clinic revenue creates additional pressure during enrollment fluctuations and economic events (such as pandemics and recessions). Developing strategic budget plans and reserves for these periods would ensure that directors are not required to make ad hoc plans when macro forces impact project recruiting.

9.0 Conclusion

The Task Force was charged with six questions. Through the incredible support of the HMC community in answering our initial survey, reviewing our two interim documents and attending and discussing the issues at numerous office hours, listening sessions and presentations, we believe that we have addressed these six questions in the sections above. However, full implementation will require significant additional thought and work from the respective constituencies charged with addressing the fine points of each recommendation.

In bringing these recommendations around the key priorities of deeper ethical understanding, greater inclusivity in institutional partnerships, a curriculum that supports diverse pathways, and meaningful student agency to life, Harvey Mudd College has the chance to fully embody its vision of preparing thoughtful problem-solvers who are ready to tackle society's most pressing challenges. The recommendations outlined in each of the above sections reflect our dedication to nurturing an inclusive, supportive environment that prioritizes the well-being and growth of its community members all while maintaining the student agency and capstone program robustness for which the college is known.

This work, however, requires collective commitment and adaptability as there are significant hurdles to overcome with our finite resources of time, energy and finances. Aligning with the Strategic Plan, these recommendations call for ongoing feedback, transparent communication, intentional collaboration and acceptance of each other's decision-making choices. By integrating ethical evaluation, creating meaningful partnerships, and supporting student agency, we can cultivate a culture where every student feels empowered and supported in pursuing a meaningful career and life.

As Harvey Mudd moves forward, these recommendations will help ensure that the College remains a model of inclusive values-based education, and an institution that inspires students to lead with integrity and engage thoughtfully in the world. Ultimately, this approach to education strengthens the entire HMC community, deepening our impact and reinforcing our commitment to a more just and compassionate society.