

# Center for Health Innovation and Entrepreneurship

## **ANNUAL REPORT**

## 2022-2023



## **Table of Contents**

## Contents

1.	Executive Summary	3
2.	Annual Report	7
3.	Exhibit A-Financial Summary	. 20
4.	Exhibit B-CHIE External Contacts	. 21
5.	Exhibit C-Grants and Contracts Submissions	. 22
6.	Exhibit D-Education-Training	. 24
7.	Exhibit E-Scientific Dissemination	. 25

## **EXECUTIVE SUMMARY**

In September 2022, Dr. Michael Bloom assumed the role of Founding Director of the Center for Health Innovation and Entrepreneurship (CHIE) at the Parkinson School of Health Sciences and Public Health, working throughout the past year with CHIE Administrator, Merly Thomas, to fully develop and operationalize the Center's mission, vision and strategic priorities, as follows:

#### **MISSION**

To cultivate a community of health entrepreneurship and innovation comprised of faculty, students, community and business leaders with a unifying mission to reduce health inequities and improve population health through interdisciplinary research, collaboration and strategic partnerships guided by our Jesuit values and Ignatian pedagogy.

#### <u>VISION</u>

To make a transformational impact on public health and equitable healthcare delivery as the leading Jesuit Catholic center for Public Health Entrepreneurship and Innovation by piloting, sustaining and scaling novel and disruptive solutions to major health challenges.

#### **STRATEGIC PRIORITIES & FY23 ACCOMPLISHMENTS**

- <u>Catalyze innovation in Teaching, Research and Service:</u>
  - Collaborated with faculty in Healthcare Administration Department to integrate concepts and methods of health innovation and entrepreneurship in undergraduate and graduate courses and cohorts - and guest-lectured in classes.
  - Led exploration of potential Parkinson participation in St. Bernard Hospital state-funded Healthcare Transformation Collaborative to generate \$3.5M for evaluation services, entrepreneurial and leadership training, and community engagement by faculty and student fellows
  - Partnered with LUC School of Education, Quinlan School of Business and Chicago Department of Public Heath to develop grant for the LUC Mental Health Incubator Initiative promoting healthcare workforce development by creating cadres of licensed mental health clinicians with training in mental health service, entrepreneurial skills, and health administration

#### Build Partnerships and Support for CHIE & Parkinson and LUC (External Engagement)

- Engaged 175+ new external stakeholders in ten months, including community, regional and national leaders of companies, organizations and government agencies to best grow and position the Center
- One successful result is that Dr. Bloom has been appointed to the Research and Collaboration Committee of the Illinois Innovation Network (IIN) which drives inclusive and integrated research, innovation and economic development across Illinois. Loyola is now the only private, non-Illinois state university that is represented on the IIN which gives us access to state funding for innovation and collaboration

 Established a Friends of Bob Parkinson Group comprised of former Abbott colleagues of the late Bob Parkinson located around the world who've previously donated to the Parkinson School to gain insights and practical advice on what other strategies we should pursue to catalyze industry involvement in the Center and School.

#### Sustain and Scale Health Entrepreneurship and Innovation Training

- Ran a successful Spring 2023 I-Corps@NCATS Short Course for seven faculty and student teams from LUC, Rush University, Advocate-Aurora and Illinois Tech; and added cohort via new graduate program -Designing for Dissemination and Sustainability taught by Dean Morrato, Dr. Fran Weaver, and Dr. Nallely Mora.
- Ours is now among the top 20 university I-Corps@NCATS programs nationally and has five-year funding from the Institute of Translational Medicine to train clinical scientists, faculty and students at Loyola and at our partner ITM institutions.
- Hired a top national I-Corps instructor, Richard Berman to co-tech teach in Spring 2023, and recruited additional Chicago-area health entrepreneurs as adjunct I-Corps instructors so we can deliver two short courses per year and offer entrepreneurial training for external organizations to build reputation and generate revenue.

#### Grow and Develop Signature CHIE Programs

- Engaged global health accelerator MATTER and collaborated with the Loyola School of Environmental Sustainability to present the 2022 Loyola Chicago Health Equity Quest as a pitch competition open to teams of entrepreneurs from Loyola University and throughout the nation. We invited innovators across disciplines and industries to submit forward-thinking solutions for creating more sustainable healthcare products and processes and/or reducing and treating the health effects of climate change that adversely affect underserved communities.
- Our success in positioning LUC nationally as an innovator in health equity work through the Health Equity Quest was demonstrated by the more than 74,000 website visits, social media impressions and unique email opens resulting from our marketing and promotion.
- Produced a video promoting Parkinson's focus on innovation and entrepreneurship which was prominently featured at the 2022 Annual Meeting and Expo of the American Public Health Association (APHA) in Boston, where it was shown on a rotating basis throughout the conference to thousands of attendees.

#### SWOT ANALYSIS

- <u>Strengths</u>
  - CHIE is supported by a Parkinson Endowment, which provides a stable financial base for building and scaling its programs
  - CHIE is part of Parkinson School which is dedicated to innovative and entrepreneurial approaches to solving major health problems across its departments
  - CHIE's I-Corps Training uniquely focused on implementation and translation of innovative health solutions across disciplines not just commercialization and startup creation
  - CHIE is helping LUC and Parkinson to develop a national reputation for promoting innovations in health equity, especially related to climate change and sustainability in healthcare delivery
- Weaknesses
  - CHIE need to secure additional funding sources to augment the endowment if we are to scale programs and staffing to fully implement our strategic mission priorities and reach our vision
  - CHIE staff has only just begun to incorporate health innovation and entrepreneurship concepts and methods in Parkinson curricula; and to collaborate with internal and external partners
  - CHIE has not yet created programs specifically targeting Parkinson and LUC undergraduate and graduate students

#### Opportunities

- Based on initial successes, there is great potential for CHIE as a catalyst for innovation, teaching and service not only at Parkinson, but throughout the university. CHIE needs to build on and expand these internal partnerships in FY24.
- There's a need and opportunity in the Illinois innovation ecosystem for CHIE to leverage the Parkinson School's unique mission, vision and departmental areas of expertise - especially in developing innovative solutions for health equity-related problems in public health, healthcare administration, health informatics, and the health sciences - for community, government and industry
- There's potential to scale CHIE's health entrepreneurship and innovation training for companies, organizations, government, colleges and universities - to grow our national reputation and generate additional revenue
- CHIE can leverage its 2023 Health Equity Quest Summit to become a national thought leader in guiding healthcare delivery research, policy and practice agendas for reducing health inequities caused by climate change

#### • <u>Threats</u>

- Many universities and organizations in Chicago focus on health equity and innovation so how can CHIE best gain support in this crowded market?
- While CHIE has been an early advocate for Health Equity and Climate Change issues, there are other universities as well as academic, government and healthcare organizations that are now working in this space, so how can CHIE best position LUC in this ecosystem.
- LUC has not devoted major resources to general entrepreneurial education programs nor tech transfer support for faculty and students, so how do we advance goals in health-specific innovation and entrepreneurship when there is little infrastructure and support?
- Similarly, many LUC faculty, students and staff are already busy with their existing teaching, studies and work so how do we best incentivize them to participate and collaborate in CHIE programs?

## **ANNUAL REPORT**



In September 2022, Dr. Michael Bloom assumed the role of Founding Director of the Center for Health Innovation and Entrepreneurship (CHIE) at the Parkinson School of Health Sciences and Public Health, working throughout the past year with CHIE Administrator, Merly Thomas, to fully develop and operationalize the Center's mission, vision and strategic priorities, as follows:

## I. MISSION

To cultivate a community of health entrepreneurship and innovation comprised of faculty, students, community and business leaders with a unifying mission to reduce health inequities and improve population health through interdisciplinary research, collaboration and strategic partnerships guided by our Jesuit values and Ignatian pedagogy.

#### II. VISION

To make a transformational impact on public health and equitable healthcare delivery as the leading Jesuit Catholic center for Public Health Entrepreneurship and Innovation by piloting, sustaining and scaling novel and disruptive solutions to major health challenges.

#### **III. STRATEGIC PRIORITIES**

- <u>Catalyze innovation in Teaching, Research and Service</u> (Aligns with Parkinson Strategic Priorities 3 & 4)
  - Integrate concepts and methods of Public Health Entrepreneurship, Health Innovation and Design Thinking in Parkinson undergraduate/graduate curricula and in Parkinson leadership, faculty, student and staff development
  - Serve as a partner and resource for identifying, piloting and scaling new revenue-generating Parkinson and LUC initiatives and programs - and facilitate interdisciplinary collaborations across the university
  - Identify and facilitate opportunities for students, faculty and staff to collaborate with external organizations on innovative approaches and solutions in public health equitable healthcare delivery, design, research and commercialization

- Build Partnerships and Support for CHIE & Parkinson and LUC (External Engagement) (Aligns with Parkinson Strategic Priorities 2, 3, 4 & 5)
  - Collaborate with external partners to fulfill CHIE's mission and actively grow the Center through grants, philanthropy, partnerships and revenue-generating activities (such as providing innovation training)
  - Engage external (community, industry and government) stakeholders in Chicago and national health innovation ecosystems to best position CHIE as a unique hub identifying, solving and scaling solutions for advancing health equity
  - Foster opportunities for student and faculty engagement with key Chicagoland, State of Illinois, and other external stakeholders for shared value creation and to maximize the Parkinson School's impact locally, nationally, and globally

## • Sustain and Scale Health Entrepreneurship and Innovation Training (Aligns with Parkinson Strategic Priorities 2, 3, 4 & 5)

- Provide I-Corps@NCATS entrepreneurial training to Loyola students, faculty and member organizations of the Institute of Translational Medicine including the University of Chicago, Rush University, Illinois Institute of Technology, Advocate Aurora and NorthShore University Health System - as part of NIH/ NCATS grant ITM 3.0 Advancing Health toward Health Equity
- Pilot and scale other I-Corps and health innovation revenue-generating educational opportunities
  such as bootcamps, in-person workshops and online certificate programs for internal Loyola and external community, corporate and government partners

### • Grow and Develop Signature CHIE Programs (Aligns with Parkinson Strategic Priorities 2, 3 and 4)

- Widely communicate, market and maximize the impact of CHIE's strategic priorities and best position and build the reputation of CHIE, the Parkinson School and Loyola University as leaders in Public Health Entrepreneurship and Innovation by growing annual programs such as the annual Loyola Chicago Health Equity Quest
- Develop new ongoing signature initiatives such as a Distinguished Speaker Series in Health Innovation and Student-centered programs (such as hackathons and pitch competitions) that expand our impact and reach in fulfilling CHIE's mission and vision

## IV. FY2023 ACCOMPLISHMENTS

• Catalyze Innovation in Teaching, Research and Service



- Collaborated with faculty in Healthcare Administration Department to integrate concepts and methods of health innovation and entrepreneurship such as problem identification, customer discovery, prototyping and pitching in undergraduate and graduate courses and cohorts - and guestlectured in classes.
- Developed undergraduate Special Topics course in Health Innovation and Entrepreneurship for Spring 2024 semester that will be open to Parkinson and non-Parkinson LUC juniors and seniors (and cross-listed with LUC Honors Program) - course could be introduction and potential pipeline to undergraduates for Parkinson graduate programs.
- Partnered with LUC School of Education, Quinlan School of Business and Chicago Department of Public Heath to develop grant proposal for the LUC Mental Health Incubator Initiative promoting healthcare workforce development by creating cadres of licensed mental health clinicians who have training in mental health service provision, entrepreneurial skills, and mental health administration.
- Led exploration of potential Parkinson faculty and student participation in St. Bernard Hospital statefunded Healthcare Transformation Collaborative - which would have generated \$3.5M for evaluation services, entrepreneurial and leadership training, and community engagement by faculty and student fellows.
- **Served** as Ex-Officio Member of the LUC Tech Transfer Committee, advocating for market-based evaluation of potentially patentable technologies in addition to scientific and legal analyses.

- Worked with Vice Provost for Research to produce white paper on LUC's potential role in helping the State of Illinois to successfully secure federal designation as a "Regional Technology and Innovation Hub" by serving as an accelerant and resource multiplier for partner universities in Illinois, ensuring societal impact of technology innovation and research translation with an equity lens
- **Engaged** entrepreneurship faculty at Quinlan School of Business in planning for FY24 collaborative events and served as judge for Quinlan Student Pitch Competition

WHAT WE'VE LEARNED: Based on our initial successes, there is great potential for CHIE as a catalyst for innovation, teaching and service not only at Parkinson, but via interdisciplinary collaboration throughout the university. We need to build on and expand these internal partnerships in FY24.



## Build Partnerships and Support for CHIE & Parkinson and LUC (External Engagement)

- A key performance indicator for this strategic priority is the number of external engagements conducted per year that may lead to partnerships and support. During FY2023, we:
- Engaged 175+ new external stakeholders 48% with industry; 38% with other universities and academic organizations; and 14% with community organizations and government agencies to best grown and position the Center by:
  - Sharing our vision for CHIE as a unique hub identifying, solving and scaling solutions for advancing health equity

- Learning about what other related academic centers, companies and organizations are doing – to further develop our value proposition (define and differentiate our uniqueness)
- See attached appendix for list of external stakeholders engaged in FY2023
- One successful result of such external engagement is that Dr. Bloom has been appointed to the Research and Collaboration Committee of the Illinois Innovation Network (IIN) which drives inclusive and integrated research, innovation and economic development across Illinois.
  - LUC is now the only private, non-Illinois state university that is represented on the IIN which gives us access to state funding for innovation and many opportunities for collaboration.
- Our ongoing discussions with **The Terry Group**, a Chicago-based national consulting firm, serve as another example of successful corporate engagement, as we're exploring joint community research projects on analytical and financial strategies to build the business case for companies to invest in health equity.
- **Established** a Friends of Bob Parkinson Group (in partnership with University Advancement) meeting quarterly via Zoom comprised of former Abbott colleagues of the late Bob Parkinson located around the world who've previously donated to the Parkinson School in order to:
  - **Cultivate** donor relationships leading to potential major gifts
  - **Gain** insights and practical advice on what other strategies we should pursue to catalyze industry involvement in the Center and School, for example, ideas on:
    - Additional certificate and degree programs we should develop for industry workforce
    - > Critical competencies that all Parkinson School graduates should demonstrate
    - > Key issues that CHIE should build industry events around
  - Identify other key industry individuals, companies and organizations we should connect with for collaboration and support



WHAT WE'VE LEARNED - That there's a need and opportunity in the Illinois innovation ecosystem for CHIE to leverage the Parkinson School unique mission, vision and departmental areas of expertise - especially in developing innovative solutions for health equity-related problems in public health, healthcare administration, health informatics, and the health sciences - for community, government and industry

## Sustain and Scale Health Entrepreneurship and Innovation Training

- A key performance indicator for this strategic priority is to run two I-Corps@NCATS programs per year as well as a graduate cohort.
- A major barrier to translation of health-related research is a lack of understanding among clinicians, researchers and scientists on the complexity of implementing their innovations. I-Corps@NCATS (Innovation Corps) is a premier entrepreneurial training program to solve this problem funded by the National Institutes of Health –National Center for Advancing Translational Sciences (NCATS). During FY2023 we:
  - Ran a successful Spring 2023 I-Corps@NCATS Short Course for seven faculty and student teams from LUC, Rush University, Advocate-Aurora and Illinois Tech in hybrid Zoom and in-person format. This was the third and final I-Corps short course funded through a "Training the Trainer" grant from the University of Alabama at Birmingham. Merly Thomas, MBA, MPH served as the Teaching Assistant for the Spring '23 cohort to onboard student teams and faculty for a successful program experience.
  - Our I-Corps@NCATS program is now among the top 20 university programs nationally, and now has five-year funding from the Institute of Translational Medicine to train clinical scientists, faculty and students at Loyola and at our partner ITM institutions including the University of Chicago, Rush University, Aurora Advocate Health, Illinois Institute of Technology, and NorthShore University HealthSystem.

- The impact of our Spring 2023 I-Corps@NCATS Short Course was validated in an ITM Report highlighting the importance of the training for teams from Rush and Illinois Tech for growing community-based research networks in Chicago.
- Hired a top national I-Corps instructor, Richard Berman to co-tech teach in Spring 2023, and recruited additional Chicago-area health entrepreneurs as adjunct I-Corps instructors so we can deliver two short course per year as part of the ITM grant plus offer additional entrepreneurial training such as faculty development within Parkinson and Loyola, as well as to external organizations. Our pool of I-Corps instructors now includes:
  - **Richard Berman**, professor at the Institute of Advanced Discovery, associate vice president of strategic initiatives and lead instructor for I-Corps at the University of South Florida
  - **Dr. Santosh Basapur**, founder of the Rush Health + Design Integration Lab and assistant professor in Rush Medical College's Department of Family Medicine
  - **Dima Elissa**, CEO and founder of VisMed-3D, a biomedical design and consulting firm and Tech and Innovation Lead at the American Medical Woman's Association.
  - **Dr. Tom Lee**, serial entrepreneur, advisor to the Society to Improve Diagnosis in Medicine and founder of president of *blazio*, a social enterprise fostering equity, empathy and entrepreneurial skills among diverse teens.
- Added a third cohort -via our new graduate program -Designing for Dissemination and Sustainability (5-10 graduate students) taught by Dean Morrato, Dr. Fran Weaver, and Dr. Nallely Mora.
- Conducted virtual and in-person customer discovery interviews applying I-Corps methodology to best design and market our entrepreneurial training to match the needs of our Loyola and ITM colleagues to translate, disseminate and implement their innovative health solutions. We've adjusted the Fall 2023 Short Course accordingly, including:
  - Extending the Fall 2023 short course from four to five weeks
  - Focusing the curriculum on concepts and methods of customer discovery, ecosystem and journey mapping, and value proposition design
  - Adding faculty office hours to the first week of classes to review initial customer discovery interviews in one-on-one sessions with teams
- **Piloted** three-day I-Corps and Design Thinking Bootcamp for faculty at Miami Dade College Medical Campus in May 2023.



WHAT WE'VE LEARNED - That as we refine and sustain our I-Corps@NCATS Short Courses, there's potential to scale our CHIE health entrepreneurship and innovation training for companies, organizations, government, colleges and universities - to grow our national reputation and generate additional revenue



## Grow and Develop Signature CHIE Programs - 2022 Loyola Chicago Health Equity Quest

- A key performance indicator for this strategic priority is producing at least one major thought leadership event per year. During the FY2023 we:
- Conducted a national RFP Process working with the University's procurement office, to identify a sustaining vendor for live Annual Health Equity Quest challenges and events. MATTER, a global healthcare startup incubator and community nexus and corporate innovation accelerator headquartered in Chicago with offices within the Merchandise Mart. MATTER mobilizes a community

 of entrepreneurs, industry innovators, scientists and clinicians committed to improving health and care for patients and communities and have extensive experience and expertise in running and managing major innovation events.

The theme for Year 2 of the challenge was: "Addressing Rapid Climate Change". Climate change poses detrimental threats to public health, and its effects are exacerbated for certain communities based on factors such as socioeconomic status, race and ethnicity, gender, and access to care.

- Engaged MATTER to work with us in presenting the 2022 Loyola Chicago Health Equity Quest as a pitch competition open to teams of entrepreneurs from Loyola University and throughout the nation. We invited innovators across disciplines and industries to submit forward-thinking solutions for creating more sustainable healthcare products and processes and/or reducing and treating the health effects of climate change that adversely affect underserved communities.
- Convened a live-streamed panel discussion to elevate interest at the intersection of climate change and health equity (September) and the Health Equity Quest culminated with a hybrid (live/virtual) pitch competition
  - Thought Leadership Panel Discussion (September 1, 2022) MATTER CEO Steven Collens moderated a discussion on environmental sustainability and healthcare at MATTER's offices with Dean Morrato, Parkinson School of Health Sciences and Public Health, Dean Tuchman, School of Environmental Sustainability, and Holly Copeland, executive director for Corporate Responsibility, Sustainability and Impact at Horizon Therapeutics.
  - Networking Dinner (October 26, 2022) for pitch competition finalists, Parkinson leadership, faculty, students, alumni and supporters including the MATTER team
  - Pitch Competition (October 27, 2022) North American startup companies applied to the pitch competition, and eight finalists presented their solutions
- **Broadened** engagement with Loyola faculty, staff and students, especially as we moved the event to a hybrid in-person and livestreamed form:
- Parkinson Health Sciences Students from Dr. Joanne Kouba's nutrition courses attended the Thought Leadership Panel Discussion
- Three Loyola alumni entrepreneurs comprised more than a third of the pitch competition finalists: Grace Lin, MD, MBA –Stritch School of Medicine alumna and Founder/CEO of HeartScreen Health; Jon Ostroff, MBA – a Quinlan School of Business alum and Founder/CEO of Fusion Foods; and Tayyaba Ali, BS –College of Arts and Sciences alumna (Physics Major) and Co-Founder of Tikal Industries, an environmental health and safety company

- Positioned LUC nationally as an innovator in health equity work was demonstrated by the more than 74,000 website visits, social media impressions and unique email opens resulting from our marketing and promotion.
- Produced a video at MATTER promoting Parkinson's focus on innovation and entrepreneurship which highlighted Loyola alumna Natrina Kennedy, Founder of the Women's Health Initiative, an organization dedicated to reducing health disparities for Black and Brown women. This video was prominently featured at the 2022 Annual Meeting and Expo of the American Public Health Association (APHA) in Boston, where it was shown on a rotating basis throughout the conference to thousands of attendees
- Followed up on the 2022 event with presentation by Dean Morrato and Dean Tuchman with MATTER CEO Steven Collens "Care for Our World: Intersecting Health Equity and Rapid Climate Change at the American College of Healthcare Executives' March 2023 Congress on Health Leadership. ACHE is the premier forum for healthcare leaders.



WHAT WE'VE LEARNED - That expanding the Health Equity Quest from an event to a series of in-person and hybrid programs, partnering with a premier national health accelerator and collaborating with Loyola colleagues such as the School of Environmental Sustainability greatly increases its impact and LUC's reputation as a major player in health equity innovation.

We're applying these lessons for the 2023 Health Equity Quest in November 2023 which is planned as a summit to: convene national innovators and thought leaders who are disrupting the space; guide healthcare delivery research, policy and practice agendas for reducing health inequities caused by climate change, particularly in vulnerable populations; and promote collaboration with a range of companies, health systems, community-based organizations and other academic institutions



## V. SWOT ANALYSIS

#### **Strengths**

- CHIE is supported by a Parkinson Endowment, which provides a stable financial base for building out its programs
- CHIE is part of Parkinson School which is dedicated to innovative and entrepreneurial approaches to solving major health problems across its departments
- CHIE's leadership is now in place founding director and administrator
- CHIE's I-Corps Training uniquely focused on implementation and translation of innovative health solutions across disciplines not just commercialization and startup creation
- CHIE is helping LUC and Parkinson to develop a national reputation for promoting innovations in health equity, especially related to climate change and sustainability in healthcare delivery

#### **Weaknesses**

- CHIE need to secure additional funding sources to augment the endowment if we are to scale programs and staffing to fully implement our strategic mission priorities and reach our vision
- CHIE staff has only just begun to incorporate health innovation and entrepreneurship concepts and methods in Parkinson curricula; and to collaborate with internal and external partners
- CHIE has not yet created programs specifically targeting Parkinson and LUC undergraduate and graduate students
- CHIE needs to fully develop its strategic plan (including unique value proposition) in order to fully take advantage of opportunities and mitigate threats to its growth

## **Opportunities**

- Based on initial successes, there is great potential for CHIE as a catalyst for innovation, teaching and service not only at Parkinson, but via interdisciplinary collaboration throughout the university. CHIE needs to build on and expand these internal partnerships in FY24.
- There's a need and opportunity in the Illinois innovation ecosystem for CHIE to leverage the Parkinson School's unique mission, vision and departmental areas of expertise especially in developing innovative solutions for health equity-related problems in public health, healthcare administration, health informatics, and the health sciences for community, government and industry
- There's potential to scale CHIE's health entrepreneurship and innovation training for companies, organizations, government, colleges and universities to grow our national reputation and generate revenue
- CHIE may be able to leverage its 2023 Health Equity Quest Summit to become a national thought leader in guiding healthcare delivery research, policy and practice agendas for reducing health inequities caused by climate change

## **Threats**

- Many universities and organizations in Chicago focused on health equity and innovation issues (see for example, the Center for Healthcare Innovation, <u>CHI</u>) so how can CHI best gain support?
- While CHIE has been an early advocate for Health Equity and Climate Change issues, there are other universities as well as academic, government and healthcare organizations that are now working in this space, so how can CHIE best position LUC in this ecosystem?
- LUC has not devoted major resources to general entrepreneurial education programs and activities nor tech transfer support for faculty and students, so how do we advance goals in health-specific innovation and entrepreneurship when there is little infrastructure and support?
- Similarly, many LUC faculty, students and staff are already busy with their existing teaching, studies and work so how do we best incentivize them to participate and collaborate in CHIE programs?

