Strategic Plan REPORT CARD



Translational Institute of Medicine (TIME)

DEPARTMENT OF MEDICINE

STRATEGIC PLAN 2020 – 2025

REPORT CARD: TIME Strategic Plan 2020-2025

The <u>TIME Strategic Plan</u> was developed in 2020 by the TIME Executive Committee.

Our strategic plan sets out a clear vision for the Institute and a roadmap for achieving this vision. It is accompanied by aspirational metrics by which our accomplishments and investments can be judged.

This is a report on the progress achieved to date on the TIME strategic plan. It addresses the plan's four core guiding principles, outlined below, for 2020, 2021 & 2022.

VISION AND IMPACT

TIME will forge a cohesive and inclusive interdisciplinary research community

• RESEARCH EXCELLENCE

TIME will prioritize 'research excellence' in its decision making

EDUCATION EXCELLENCE

TMED will train highly qualified people (HQP) who will act as ambassadors.

• GROWTH AND SUSTAINABILITY

TIME will develop a sustainable financial plan to meet its goals.

VISION AND IMPACT

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TIME will forge a cohesive and inclusive, interdisciplinary research community.

STRATEGIES	ROAD MAPS	METRICS OF SUCCESS
Enhance the visibility of translational medicine at Queen's University and beyond.	 Establish and maintain a tool that connects researchers, infrastructure and expertise within the Faculty of Health Sciences. Develop this tool to map FHS (Faculty of Health Science) researchers with interdisciplinary researchers across Queen's University. Showcase research success to demonstrate our global impact on human health. Capture and publicize international collaborations and research successes. 	 TIME is recognized as a Tier 1 research institute. Build an online network tool across the faculty and the University. Increase visibility within the Faculty of Health Science and the University by enhancing communication networks.
Build an interdisciplinary research community within Queen's University and beyond.	 Ensure that TIME members maximize the benefits and meet their responsibilities. Nurture collaborative and interdisciplinary research by promoting targeted funding, including Incubator grants. Build a network that responds to changing global problems and shifting funding landscapes. Ensure that TIME researchers have access to state-of-the-art research platforms. 	 Increase the number of Incubator grants from 4 to 8. Capture and publicize international collaborations and research successes. Increase the number of TIME members with EDI training.
Ensure that TIME is an inclusive, equitable and diverse organization.	 Ensure that our management team, executive team and board of directors reflect the diversity of Canada. Ensure that all TIME members have access to Equity, Diversity and Inclusion (EDI) training. Support TIME members regardless of their sex, gender, ethnicity, religion or background. 	

TIME is recognized as a Tier 1 research institute.



Goals achieved by 2022

Developed the <u>TIME Strategic Plan</u> and set goals required to become a Tier 1 Research Institute at Queen's University-Interdisciplinary Research (2020).

<u>Institutional Criteria for Tier 1 Institute:</u>

• Alignment with Queen's Strategic Research Plan



• Research Excellence; Leading Edge Research, National &



International Recognition & Impact

• Evidence of Regional, National & International Collaboration



Training & Development of Highly Qualified Personnel



Knowledge Mobilization Activity



Defined Membership





Achieved significant growth in 5 of 6 criteria (2022)

ngoing

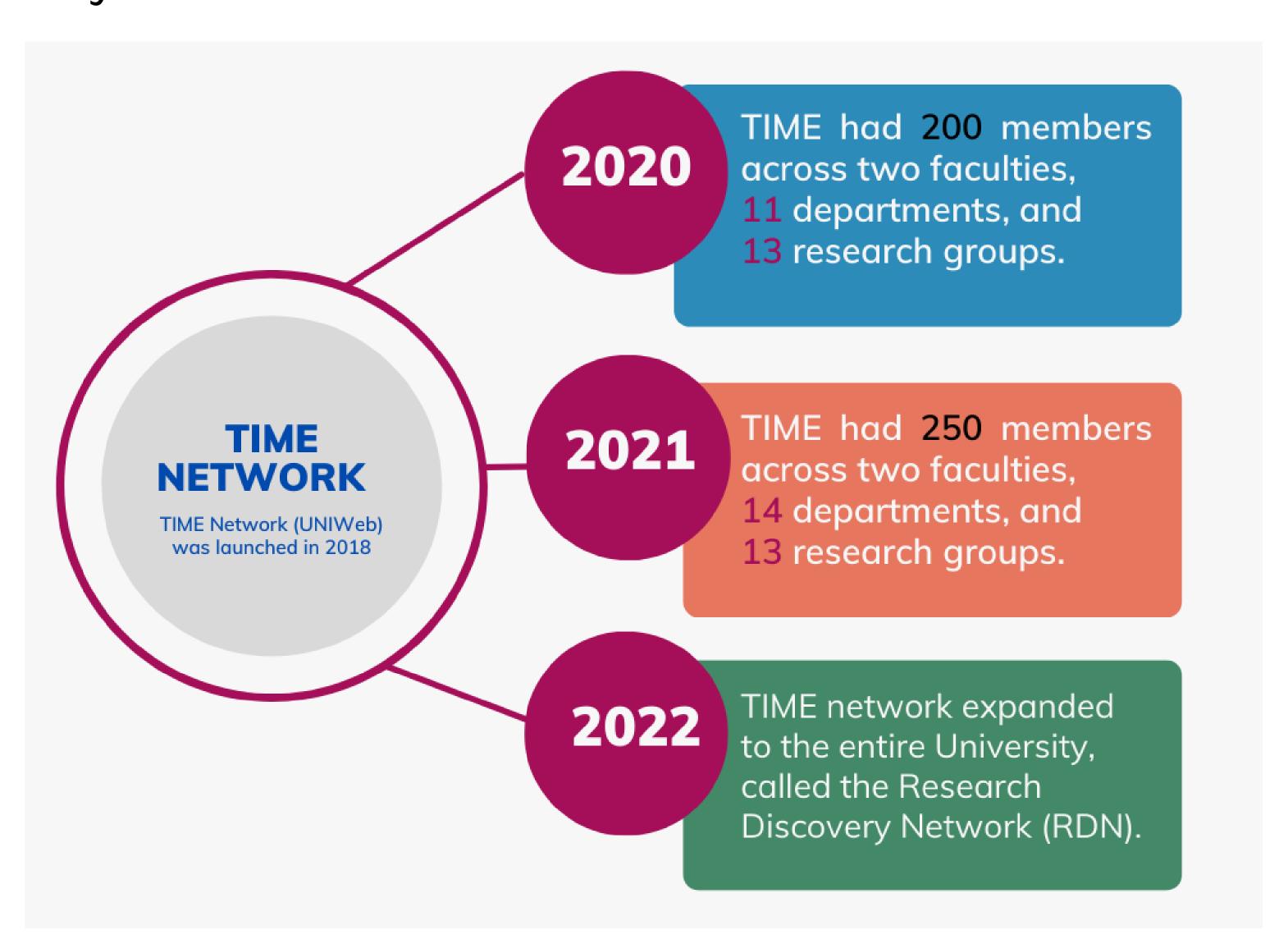
 Continue to grow in all areas with more emphasis on Knowledge Mobilization Activity.

Build an online network tool across the faculty and the University.



Goals achieved by 2022

- The TIME Network (UNIWeb) was launched in 2018. By 2020 TIME had 200 members across 2 faculties, 11 departments, and 13 research groups.
- Expansion of the <u>TIME Network</u> with more than 250 members across 3 faculties, 14 departments and 13 research groups by the year 2021.





Achieved goal (2022). TIME Network expanded to the entire University, called the Research Discovery Network (RDN).



Ongoing

- The TIME Network will continue to expand with added features, including research metrics, e.g., h-index, and other tools that will promote its use by the membership.
- The release of the new version 3.0 with the h-index feature is scheduled for Summer 2023.
- Ensure TIME Network within RDN remains up to date.
- Stimulate and monitor the use of the site.

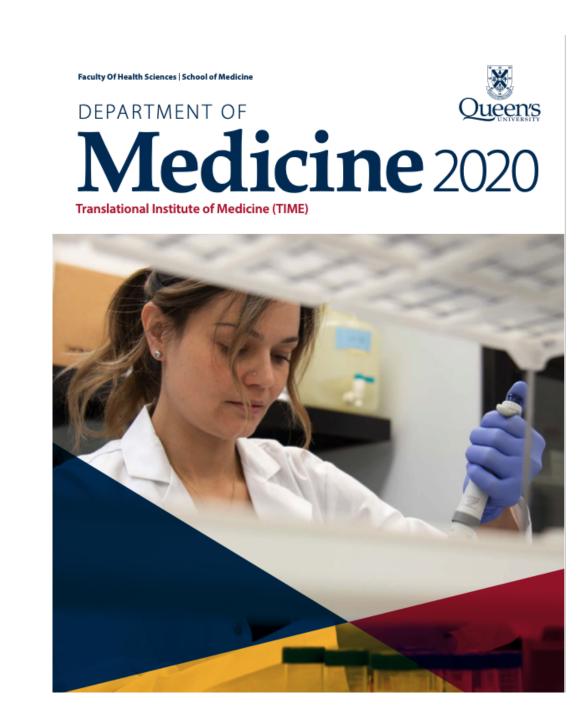
Increase visibility within the Faculty of Health Science and the University by enhancing communication networks.



Goals achieved by 2022

- <u>TIME Symposium (2019)</u>.
- Training sessions for the members.
- Launch of the <u>TIME Showcase</u> which highlights the research work and publications.
- Launch of the <u>TIME Hall of Fame</u>, a platform to highlight highimpact publications and grants.
- Celebrate achievements and success stories on the <u>TIME website</u> & Twitter.
- International guest speakers for the TIME Medical Grand Rounds.
- TIME EDI Medical Grand Round.
- TIME Annual Reports:







TIME Annual Report 2019

TIME Annual Report 2020 TIME Annual Report 2021



TIME is recognized as one of the 6 major superclusters in the QHS strategic plan, which is disseminated widely within and outside the University. University creates Research Discovery Network using the TIME model, which further connecting TIME researchers. The TIME 2021 Annual Report is widely disseminated within QHS and the University.



Ongoing

- Increase visibility with signage on King St. and at KHSC.
- Promote three stories of discoveries on social media.
- Guest blog Dean
- Create videos and promotional content for TIME research platforms to highlight the resources and expertise available for the TIME membership.

Capture and publicize international collaborations and research successes.



Goals achieved by 2022

- TIME Incubator Grants encourage their members to collaborate with researchers across different faculties and across Canada.
- TIME hosts monthly showcases on the Network, highlighting research successes and disseminates these successes on social media.





Ongoing

 Start the TIME <u>Podcast series</u> and highlight collaborative research work of TIME members with national and international collaborators.

Increase the number of Incubator Grants from 4 to 8.



Goals achieved by 2022

- 2019- **5 grants**, totalling **\$287K**
- 2020-4 grants, totalling \$150K
- Track the success of the Incubator Grants



TIME Incubator Grant recipients have successfully secured external funding* of more than \$ 5M since 2019.

TIME Incubator Grant	Secured External funding	Funding Agency	Year
Recipients			
	\$918,000	CIHR	2021
David Reed	\$140,000	NSERC	2021
Amer Johri	\$150,000	CIHR	2021
	\$918,000	CIHR	2020
	\$330,000	Philips Healthcare	2019
Jennifer Flemming	\$99,203	CIHR	2021
Gavin Winston	\$1,139,850	CIHR	2022
	\$249,500	PSI	2021
Stephen Archer	\$1,067,176	CIHR	2022
	\$422,280	CIHR	2022

^{*}The above principal investigators (PIs) have successfully secured external funding for their grants, which may cover topics that differ from those originally funded by the TIME Incubator grants.



• TIME plans to offer 4 incubator grants in 2023 and continues to look for partners to grow this number. TIME continues to track the successes of previous investments.

Increase the number of TIME members with EDI training



Goals achieved by 2022

- Dr. Mala Joneja has joined the TIME Executive as the EDIIA Lead.

 She works diligently with the TIME Management Committee to coordinate, develop, implement, and monitor Human Rights, Equity and Accessibility Initiatives within the Institute and to ensure that operations are conducted through an equity lens.
- TIME strives to ensure that all management members will have EDI training by 2023.
- TIME continues to offer an annual EDIfocused Grand Round; Dr. J. Flemming presented inaugural talk on Alcohol-Associated Liver Disease in Women (2022).



Dr. Mala Joneja TIME EDIIA Lead



Ongoing

- Track and encourage TIME members to keep their EDIIA training up to date.
- TIME EDIIA Lead will coordinate training delivery and lead teams who can help to develop and deliver Human Rights, Equity and Accessibility training.
- Provide information, resources and advice to TIME faculty, students and staff that supports the implementation of equity and accessibility initiatives policies included in the TIME Strategic Plan.

RESEARCH EXCELLENCE

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TIME will prioritize 'Research excellence' in its decision making.

STRATEGIES	ROAD MAPS	METRICS OF SUCCESS
Develop and optimize the use of state-of-the-art technology.	 Map resources and expertise across the Faculty of Health Sciences. Continue to develop research platforms designed to improve research excellence at Queen's University. Strategic recruitment and retention of career scientists to optimize the use of these research platforms. 	Grow the number of scientists operating the TIME research platforms from 2 to 4. Increase extramural research funding by 25% in the next three years. Increase research bibliometrics for TIME
Improve the success rate of Tri-Council and related external grant funding.	Fund interdisciplinary teams of researchers with Incubator grants to strengthen their competitiveness. Be leaders and mentors in grant review exercises to enhance competitiveness.	members/groups by 25% in the next three years. Increase Biobanking programs. Ensure patient advocate on
Make translational research synonymous with Queen's University on the national and international stage.	 Monitor research excellence and showcase successes. Promote broad collaborations that bring value to Queen's University. Grow our international research impact. Promote patient engagement. 	Host an annual patient appreciation event.

Grow the number of scientists operating the TIME research platforms from 2 to 4.



Goals achieved by 2022

- At its outset, TIME funded two scientists operating research platforms (2020)
- Two more have been hired, *Oliver Jones* (Histologist, Transmission Electron Microscopist) and *Curtis Noordhof* (Molecular Imaging & Cytometry Specialist) at *Queen's CardioPulmonary Unit (QCPU)*.



Four scientists now operating research platforms (2022)



Ongoing

• TIME will continue to support research by investing in the scientists.

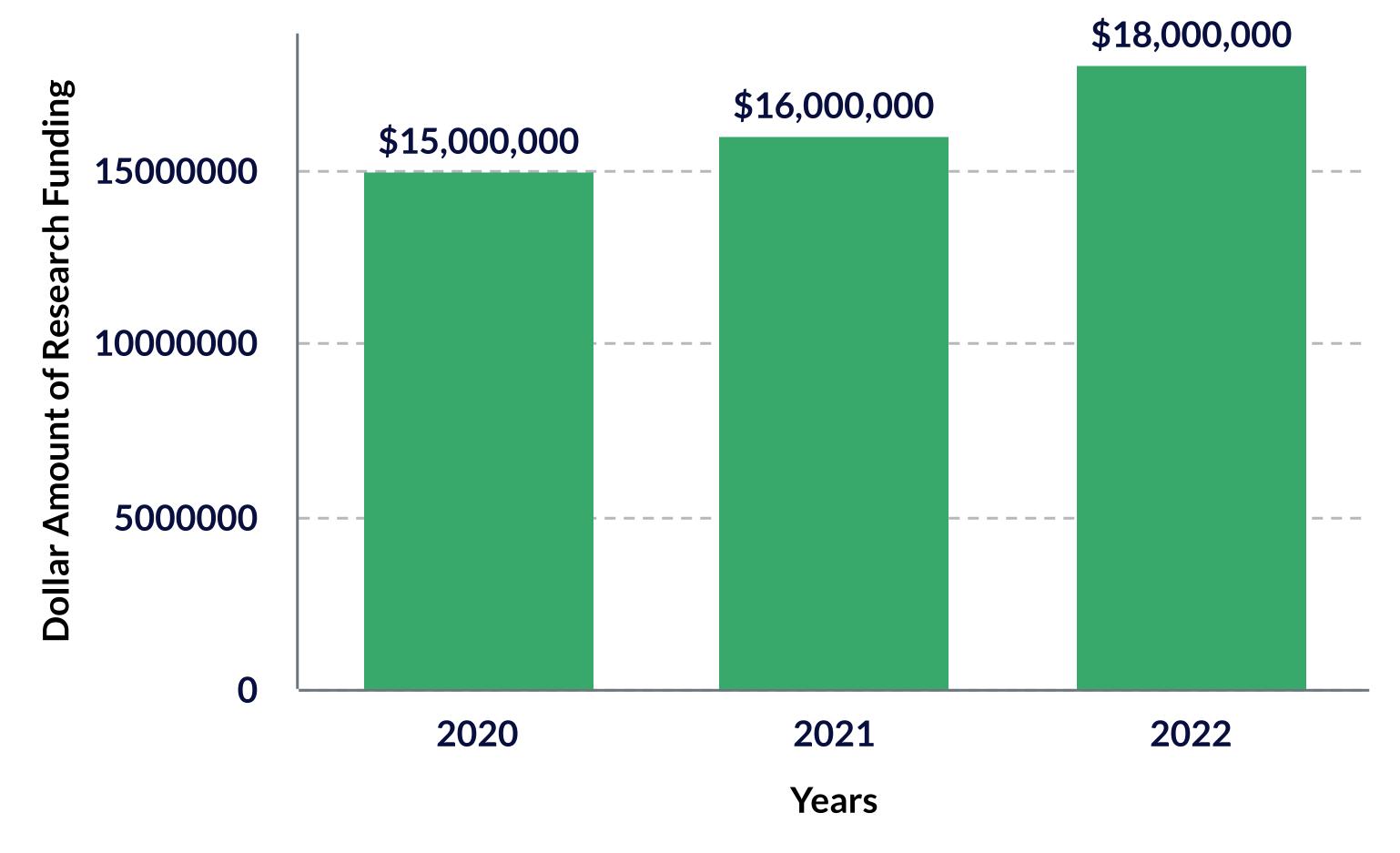
Increase extramural research funding by 25% in the next three years.



Goals achieved by 2022

- 2020 Research Funding- Over \$15M*
- 2021 Research Funding- Over \$16M*
- 2022 Research Funding- Over \$18M*





* External Research
funding received all
TIME members in the
Department of
Medicine, DBMS &
Pathology (Includes
funding received from
Government CFI, Tricouncil, Clinical
Trials, Associations/
Societies &
Foundations)

Research Funding Received by TIME Members in 2020-2022

TIME continues to offer incubator grants to grow competitiveness for external grant applications.



- TIME members support and participate in the internal grant review program. TIME administers the program for 6-8 members each cycle.
- TIME encourages members to apply for external funding.

Increase research bibliometrics for TIME members/groups by 25% in the next three years.

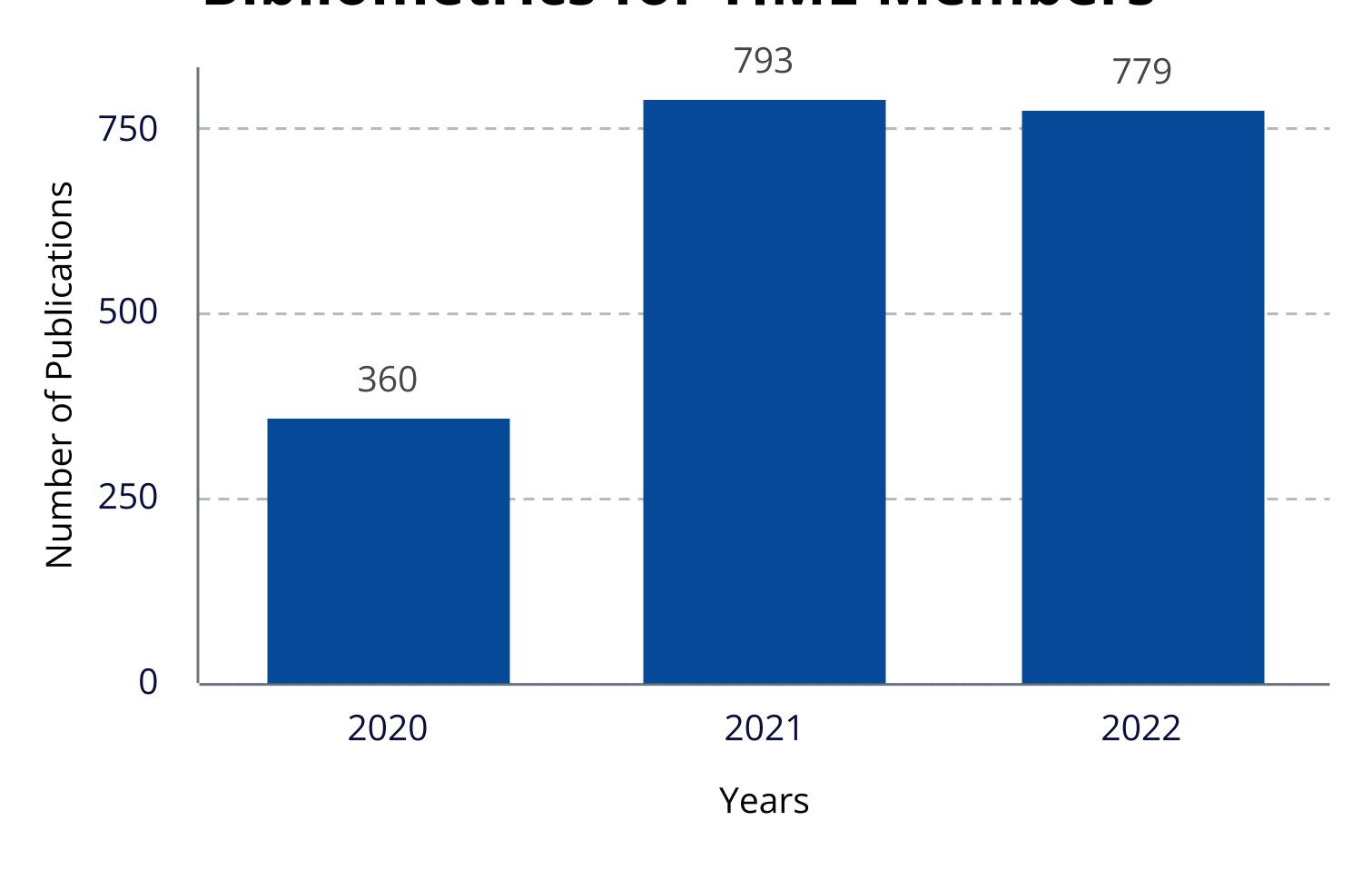


Goals achieved by 2022

- 2020 Over 360 publications*
- 2021- Over 793 publications by TIME members
- 2022- Over 779 publications by TIME members



Bibliometrics for TIME Members



Number of Publications by 250 TIME Members in 2020-222

*Information is based on the number of publications uploaded on to the TIME Network.



Ongoing

- Increase research bibliometrics for TIME members by 25% over the next three years.
- Track impact including patents and commercialization.

Increase Biobanking programs.



Goals achieved by 2022

- GIDRU, CRI
- Added QCPU TIME tracker program to GIDRU IMAGINE Biobanking program (2022).



• Continue to support biobanking programs and broaden participation by other research groups.

Ensure patient advocate on the governing board.



• This has been largely delayed due to the pandemic and will be revisited in 2023.

Host an annual patient appreciation event



• TIME will host a virtual patient appreciation event in 2023.

EDUCATION EXCELLENCE

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TMED will train highly qualified people (HQP) who will act as ambassadors.

STRATEGIES	ROAD MAPS	METRICS OF SUCCESS
Deliver world-class graduate education in TMED and related translational medicine programs.	 Promote, develop and enhance existing graduate programs to ensure that top local, national and international students are recruited to Queen's University. Ensure that students are trained to utilize new technologies and interpret the resulting data. Prepare online content for the internationalization of our training and education. 	Grow the student numbers in the TMED program by 30% in year 6. Maintain and develop student satisfaction. Track the competitiveness of our graduates in successful multi-
Develop and deliver relevant training courses, symposiums and workshops to students, staff and faculty to enhance the research excellence mission.	 Promote, develop and enhance training courses for students, staff and faculty engaged in translational research at Queen's University. Establish a guest speaker program that can provide rounds on the most up-to-date translational research within and outside of Queen's University. Ensure that members have the resources they need to access research services at Queen's and apply for external funding. 	Track student first author papers, external/internal awards and scholarships. Track the inclusivity in the TMED training program.
Enhance student academic experience to better prepare graduates for success.	 Ensure that students receive state-of-the-art training in translational medicine. Ensure that students can effectively communicate with health care professionals, basic scientists and the public. Foster an inclusive and collaborative student experience. Provide mentorship for graduates to maximize their success in the program as well as a career path. 	

Grow the student numbers in the TMED program by 30% in year 6.



Goals achieved by 2022

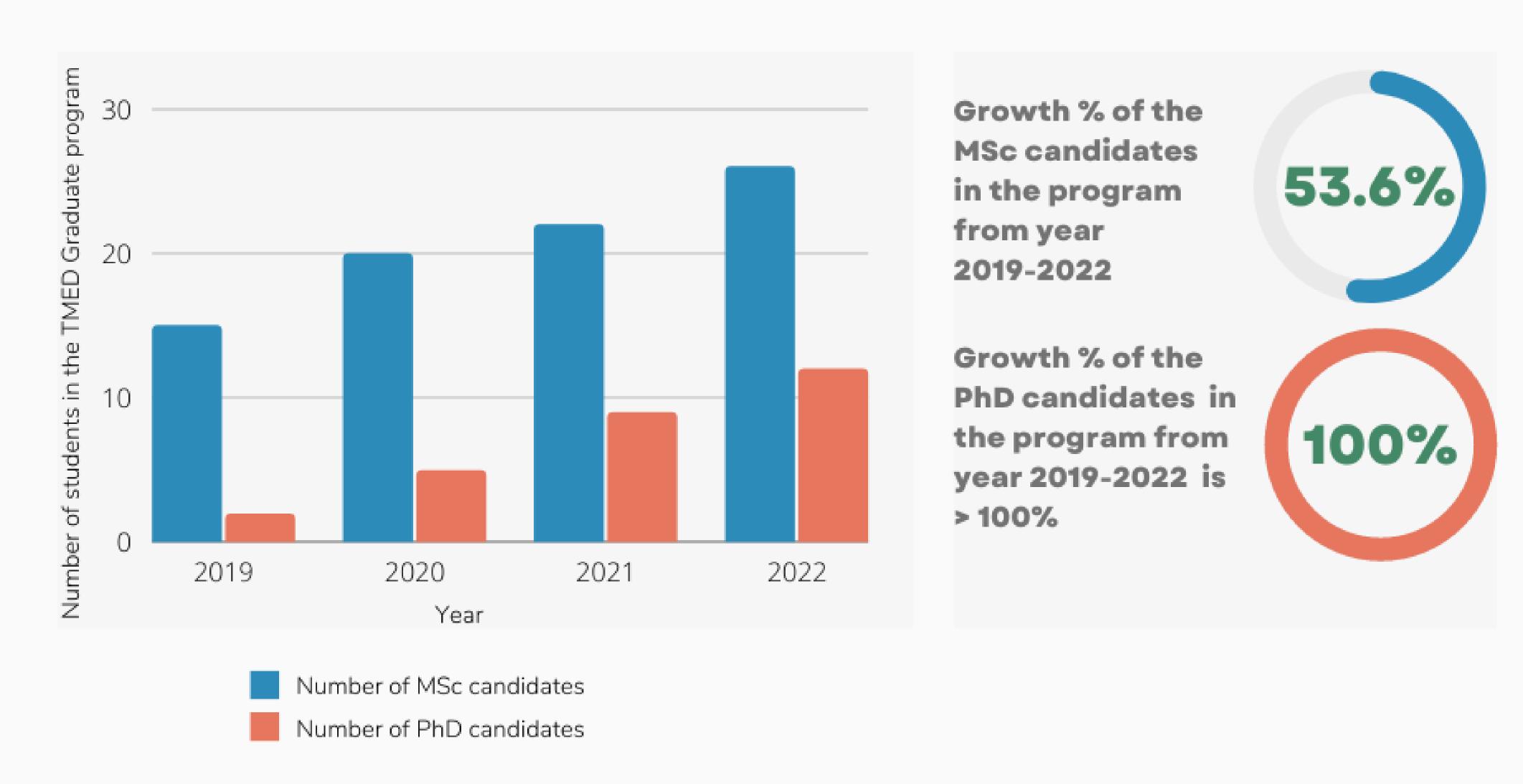
• 2019-MSc Students: 15 and PhD Students: 2

• 2020-MSc Students: 20 and PhD Students: 5

• 2021-MSc Students: 22 and PhD Students: 9

• 2022-MSc Students: 26 and PhD Students: 12

GROWTH OF TMED PROGRAM



GRAPHIC REPRESENTATION OF THE GROWTH % OF THE TMED GRADUATE PROGRAM IN THE LAST FOUR YEARS







• The program will continue to grow.

Maintain and develop student satisfaction.



Goals achieved by 2022

- The TMED team meets with the students regularly and interviews them about their experience. In addition, every course is surveyed.
- TMED Program staff, in consultation with the TMED Student Society, created a student experience survey focused on student mental health well-being and EDII focus. The students complete the survey at the end of the academic year.
- In the 2022-23 academic year, the TMED Student Society has focused on creating EDII in healthcare-related articles that are posted here: <u>TMED Students Society.</u>
- There is a new EDII role within the student society as a point of contact for the students. Dr. Mala Joneja introduced a new workshop called "Inclusion in Academic Medicine: Conversation and Inspirations."
- Students have been engaged in social media campaigns with EDIIrelated content to raise awareness; Black Heritage Month, Pride Month and Truth and Reconciliation.
- TMED Student Society organized an EDII Conference in April 2022, featuring graduate and medical student speakers working on EDII-related research.

Ongoing

• Continue to collect student satisfaction data through course surveys, interviews, incoming student surveys and overall student experience surveys at the end of each academic year.

Track the competitiveness of our graduates in successful multi-disciplinary career paths



Goals achieved by 2022

- 2020-Graduated successfully: 1 MSc
- 2021-Graduated successfully: 6 MSc
- 2022-Graduated successfully: 8 MSc and 1 PhD



Year	MSc/PhD	Current Placements
2020	1 MSc Graduate	Post-doctoral Research Fellow
2021	6 MSc Graduates	 Three MSc Graduates – Medical School Two MSc Graduates- PhD One MSc Graduate – Assistant Professor, Division of Hematology (Department of Medicine)
2022	8 MSc Graduates	 Three MSc Graduates –Medical Schools Two MSc graduates are working as Research Associates
	1 PhD Graduate	 PhD Graduate is a Research Associate and Assistant Professor (Term Adjunct)

Ongoing

Report on the destinations of the graduates from the year 2023.

Track student first-author papers, external/internal awards, and scholarships.



Goals achieved by 2022

2020

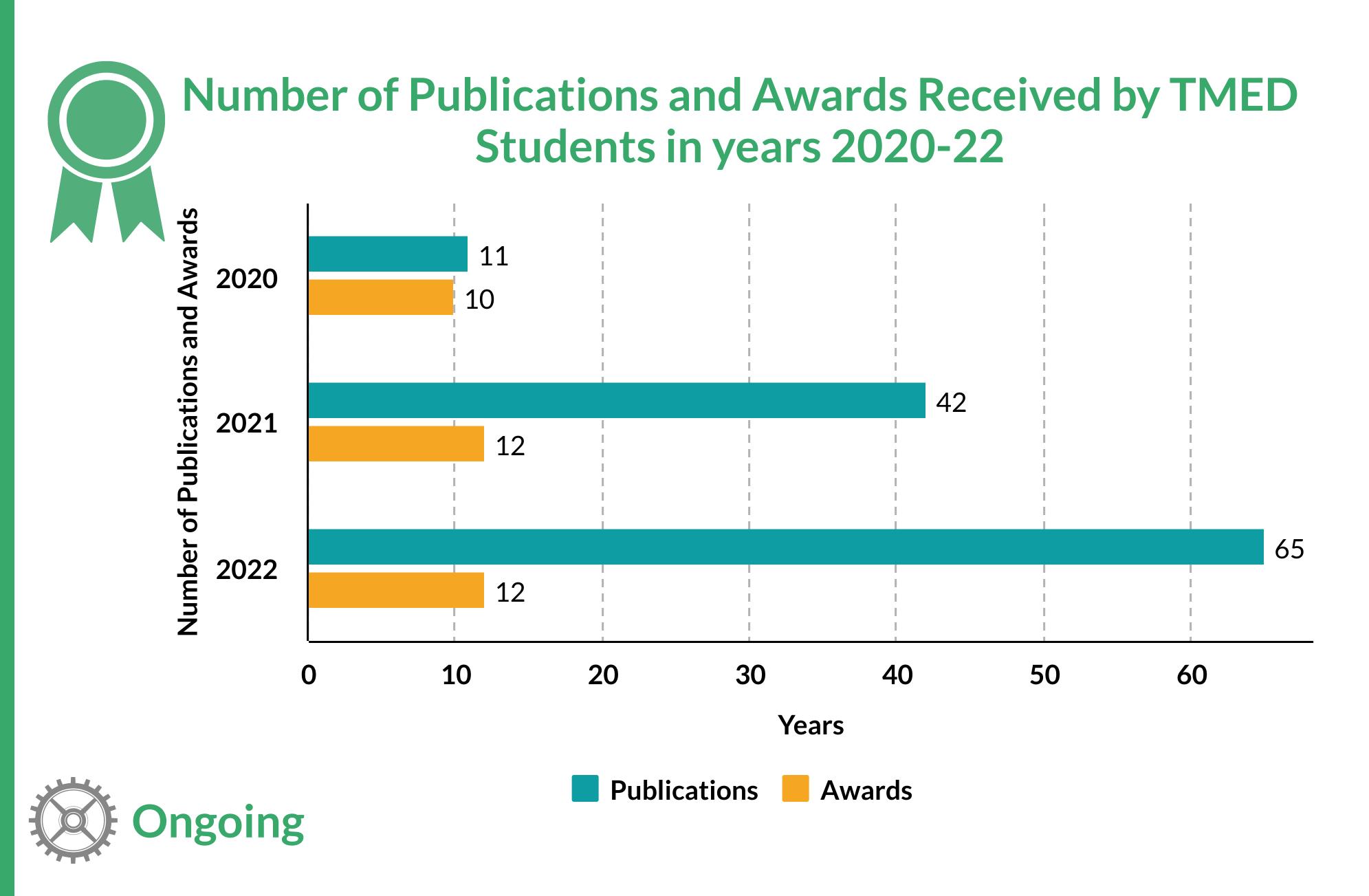
- 11 publications in 2020 by TMED students.
- 10 Internal/External Awards & Scholarships won by TMED students in 2020.

2021

- 42 publications in 2021. 16 were 1st author and 8, 2nd author.
- 12 Internal/External Awards & Scholarships won by TMED students in 2021.

2022

- 65 publications in the year 2022. 26 were 1st author and 8, the 2nd author.
- 12 Internal/External Awards & Scholarships won by TMED students in 2022 (4 National level 2 CGS-D and 2 CGS-M and 1 OGS).



• TIME will highlight the students' first author papers on the TIME Showcase and TIME Hall of Fame on it's website.

Track the inclusivity in the TMED training program.

Goals achieved by 2022

- The annual EDII survey was created and distributed to the students by the TMED team in 2020, and results were shared in the TIME Annual Report 2020. A new EDII Representative role was created with the TMED Student Society as a result of the survey recommendations.
- EDII Representative in consultation with the TMED Program Staff, reviewed TMED admission processes, documents, website, handbook and other materials with an EDII lens and provided recommendations for changes.
- TMED Student Society organized EDII in Health Care miniconference in April 2022, featuring graduate and medical students' EDII-related research.
- TMED Student Society created the EDII Spotlight section on the website and promoted through social media posts.

Ongoing

• EDII Spotlight will continue to feature healthcare professionals using an EDII lense, which will be amplified through social media channels throughout the year.

GROWTH & SUSTAINABILITY

GROWTH AND SUSTAINABILITY

TIME will develop a sustainable financial plan to meet its goals.

STRATEGIES	ROAD MAPS	METRICS OF SUCCESS
Enhance philanthropic funding.	Position TIME with Advancement as a priority institute for philanthropic funding. Ensure that research platforms are visible and part of the university tours for donors. Work with local/national companies to secure funding/donations.	Raising multi-million dollars in the next five years. Secure hard funding for 2 new scientists operating the TIME research platforms for the next five years.
Establish a sustainable financial model through institutional support.	 Work with our Dean to secure funding for our mission. Promote TIME as a Tier 1 research institute. Develop industry partnerships. 	Secure funds to cover the warranties for all major infrastructure costs. Increase industry-funded investigator research programs.

Raising multi-million dollars in the next five years.



- DOM contribution of \$100,000/year (2018-2022).
- TIME/QCPU received \$500,000 from the WJ Henderson Foundation with matching funds of \$500,000 from the department of Medicine in 2020.
- TIME developed a 5-year financial sustainability plan with funding from DOM, QHS, and the KHSF (2022-2027).



• Develop a business plan for 2027.

Secure hard funding for two new scientists operating the TIME research platforms for the next five years.



- QCPU CFI Award (2017-2022) \$8,000,000 (2020).
- TIME members (Stephen Archer and Lynne-Postovit) led a large CFI proposal (\$13.15M) that if successful will provide an additional \$1.6M in salary and service agreements (2022).

Ongoing

Operationalize CFI if successful and if not, plan for the next CFI opportunity.

Secure funds to cover the warranties for all major infrastructure costs.



Goals achieved by 2022

• CFI proposal if successful will include a significant number of service warranties.



• Plan for alternative funding opportunities if CFI is unsuccessful.

Increase industry-funded investigator research programs.



Goals achieved by 2022

• TIME members participated in a mini-retreat organized by QHS on research commercialization in November 2022.

Ongoing

• Continue to promote training and opportunities for commercialization.







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