# CAMPEP Program Directors Breakfast Graduate Programs Report

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## **Graduate Programs Updates**

- Program Submission Updates
- Review of Graduate Program Annual Reports AY-2023-2024
- Proposed updates to Graduate Standards

## CAMPEP

Commission on Accreditation of Medical Physics Education Programs, Inc.

#### Graduate Education Programs

Accredited Degree Programs

General Information/ Information for Program Directors

Standards for Accreditation of Graduate Educational Programs

#### **Graduate Programs**

CAMPEP offers accreditation of graduate educational programs in medical physics. The goal is to ensure that a graduate program provides rigorous and thorough education such that program graduates are equipped with the appropriate skills to pursue a career in medical physics.

The **Process** of CAMPEP accreditation of graduate programs requires that the program submit a self assessment report using the **template** available giving evidence of consistency with a set of clearly stated **standards**. After review of this report, a survey team will conduct a program site visit to validate the assessment. If successful, accreditation is granted for a period of 3 years. Re-accreditation requires an updated self assessment report. The **Graduate Education Program Review Committee (GEPRC)** is responsible for managing the accreditation of graduate programs and

# Graduate Program Accreditation and Reaccreditation Self-Study Submissions

- MOCAM has limited support for updates and revisions
- Transitioning to SurveyMonkeyApply system

- Currently being implemented for Residency Program applications
- Template established for Graduate Programs

## July 2025 Status Overview of Graduate Programs

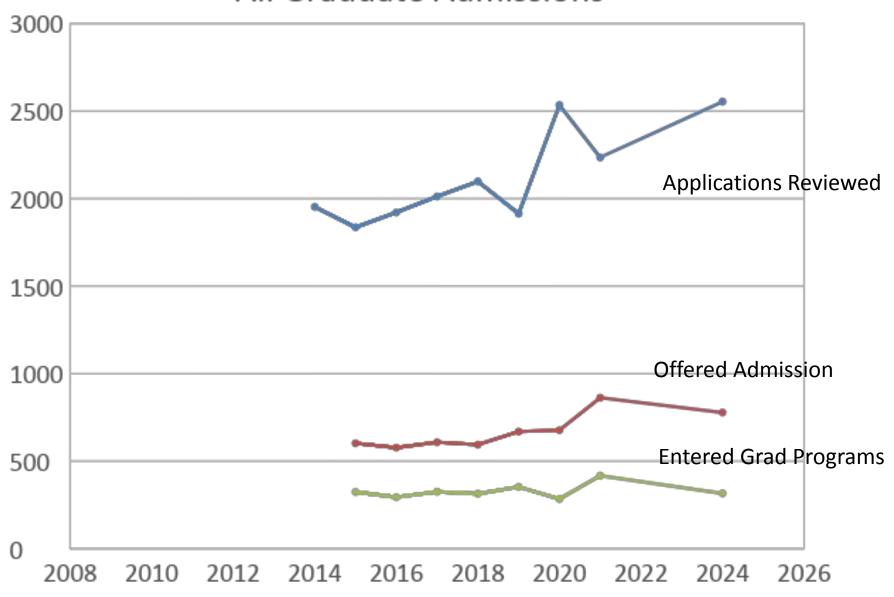
2025 (2021)

- # Accredited graduate programs (institutions): 64 (57)
- # Accredited DMP programs: 4 (4)
- # Programs in initial review process: 1 (PhD) (2)
- # Accredited programs in:
  - US 46 (42)
  - Canada 15 (11)
  - Outside North America 3 (4)

#### **Accredited Certificate Programs**

- # in Graduate programs: 37 (24)
- # in Residency programs: 5 (5)

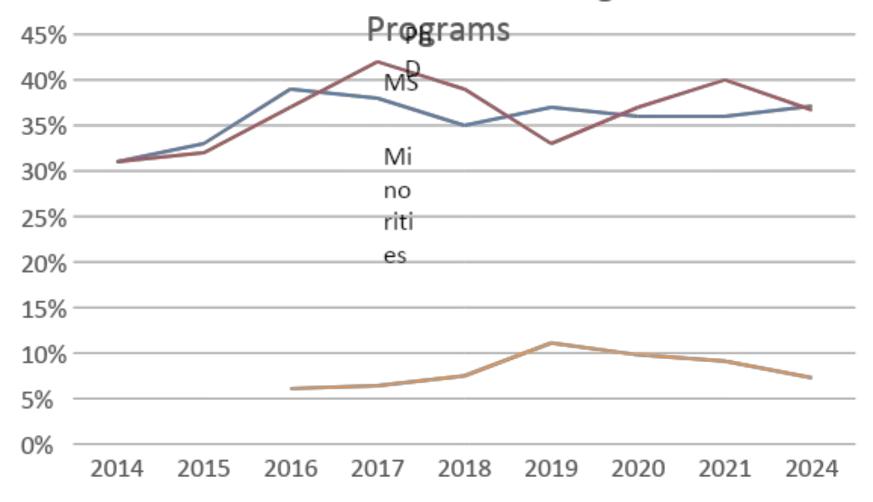
#### All Graduate Admissions



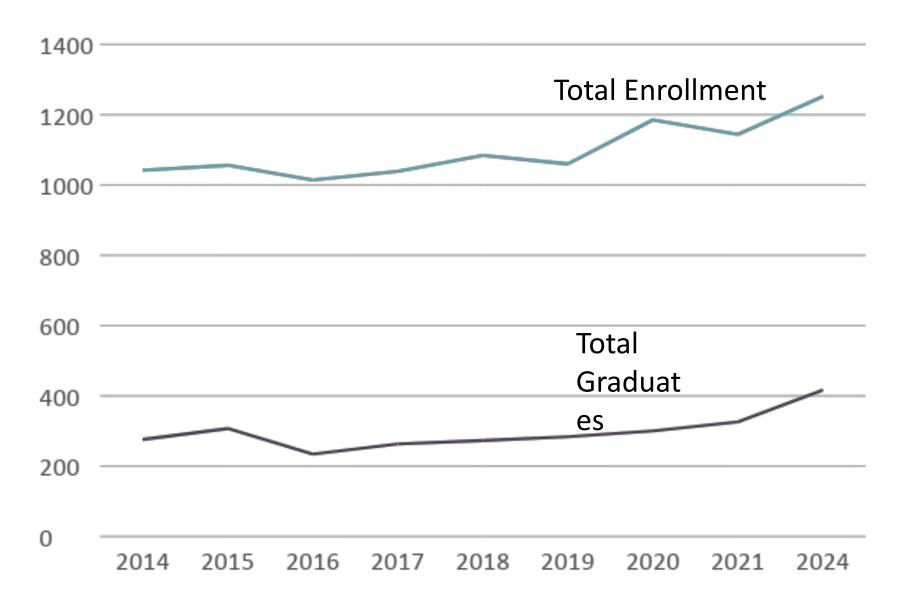
### Graduate Program (MS, PhD, DMP) Applicants

	2015	2016	2017	2018	2019	2020	2021	2024
# applications reviewed	1836	1921	2012	2098	1914	2535	2235	2554
# offered admission	577	608	594	669	677	862	778	795
# matriculated	294	325	314	353	284	417	316	411
Average GPA (MS/PhD/DMP)	3.5/3.6	3.5/3.7	3.4/3.6	3.4/3.6	3.5/3.7/3.4	3.5/3.6/3.4	3.5/3.8/3.4	3.4/3.6/3.6

#### % Females & Minorities Entering Graduate



#### **Enrollments**



## **Enrollment and Graduates**

	2015	2016	2017	2018	2019	2020	2021	2024
Enrollment								
MS/MSc	449	402	416	447	433	501	488	547
PhD	572	577	583	603	598	660	637	679
DMP	35	35	40	34	29	24	19	26
Total	1056	1014	1039	1084	1060	1185	1144	1252
Graduates								
MS/MSc	202	139	159	168	171	193	203	280
PhD	99	89	94	94	103	130	113	131
DMP	6	6	10	11	10	9	10	6
Total	<i>307</i>	234	263	<i>273</i>	284	300	326	417

## MS/MSc Graduate Destination (280)

	2016	2017	2018	2019	2020	2021	2024
Applied to residency		50%	43%	53% (91)	40% (78)	40%(82)	42%(118)
Accepted into residency		68%	68%	74% (67)	73% (57)	78% (64)	81% (95)
Entered RT residency	30%	28%	28%	(54)	27%(48)	27% (54)	31% (86)
Entered IP residency	4%	5%	5%	6% (11)	5% (9)	6% (12)	8% (21)
Clinical position	17%	8%	8%	11% (19)	12% (24)	6% (13)	10% (29)
Another degree	35%	38%	38%	33% (57)	25% (48)	21% (42)	29% (81)
Position in industry	7%	7%	7%	8% (13)	8% (15)	4% (9)	9% (25)
Position in government	2%	1%	1%	1% (2)	1% (2)	2% (3)	2% (5)
Still seeking position	2%	4%	4%	1% (2)	5% (11)	3% (7)	5% (13)
Position outside MP	0%	1%	8%	1% (2)	4% (8)	7% (15)	7% (1)

81 %
Percent of
MS who
applied to
residency
were
accepted

## PhD Graduate Destination (131)

	2016	2017	2018	2019	2020	2021	2024
Applied to residency		54%	48%	49% (50)	48% (62)	47%(53)	63%(83)
Accepted into residency		102%	96%	98% (49)	94% (58)	96% (51)	99% (82)
Entered RT residency	37%	41%	48%	45% (46)	42% (49)	47%(53)	50%(65)
Entered IP residency	9%	11%	6%	8% (8)	8% (9)	5% (6)	13% (17)
Clinical non-academic	15%	10%	5%	8% (8)	2% (3)	5% (3)	7% (9)
Position in academia	19%	24%	21%	13% (13)	8% (10)	12% (13)	8% (11)
Position in industry	3%	1%	5%	5% (5)	11% (14)	13% (15)	6% (8)
Position in Government	3%	0%	2%	3% (3)	3% (4)	1% (1)	4% (5)
Position outside MP	3%	3%	4%	4% (4)	6% (8)	4% (5)	2% (2)
Still seeking a position	3%	1%	4%	4% (4)	<1% (1)	2% (13)	0% (0)

99% Percent of PhDs who applied to residency were accepted

## Certificate Graduate Destinations (43)

	2016	2017	2018	2019	2020	2021	2024
Accepted into residency	-	45%	81%	67%	69%	67%	77%
Entered RT residency	-	32%	70%	64%	60%	58%	56%
Entered IP residency	4%	3%	11%	10%	0%	9%	7%
Non-academic clinical	46%	32%	56%	7%	6%	11%	7%
Entered another degree program	4%	3%	11%	0%	0%	0%	0%
Position in academia	4%	8%	11%	10%	22%	16%	12%
Position in industry	0%	0%	0%	0%	3%	5%	2%
Position in Government	38%	5%	11%	0%	0%	0%	2%
Position outside MP	0%	0%	0%	2%	3%	0%	0%
Still seeking a position	0%	0%	0%	5%	3%	0%	16%

## **DMP Graduate Destination (6)**

	2020	2021	2024
Non-academic clincial	89% (8)	80% (8)	75% (4)
Academic (tenure-track)	11% (1)	20% (2)	17% (1)
Industry	0	0	17%(1)

### Updates to Graduate Standards

Provide more definitive guidance for foundational physics expectations

Updates to Curriculum Subject Areas

- Promote equal depth of coverage for all subject areas
  - Modified Narrative/Preamble for Grad Standard 8

3.1 Students entering a medical physics graduate educational program shall have a strong foundation in basic physics. This shall be demonstrated either by an undergraduate or graduate degree in physics, or by a degree in an engineering discipline or another of the physical sciences and a with coursework that is the equivalent of a minor in physics (i.e., CAMPEP considers one that includes at least three upper-level undergraduate physics courses taught through a physics department that would be required for a physics major to be equivalent to a minor in physics. The topics of these courses may include classical mechanics, modern physics, quantum mechanics, electromagnetism, statistical physics and thermodynamics, optics, nuclear/particle physics and astrophysics).

In addition, students entering a medical physics certificate program must either hold a PhD in physics or closely related discipline or be enrolled in a PhD program in physics or closely related discipline.

3.33.2 If a graduate program conditionally admits applicants with deficiencies in their academic background, the remedial physics education of such students shall be well-defined and documented.

#### 8. Core Graduate Curriculum

The structure of course work in a graduate <u>medical physics</u> education program in <u>medical physics</u> may be defined by the program but shall, as a minimum, include the topics <u>identified in Graduate Standards 8.1</u> <u>through 8.7. as part of the graduate curriculum listed below.</u>

Depth of coverage: All courses shall be taught at an appropriate graduate level. Graduate programs shall provide education of equivalent depth in Imaging and Radiation Therapy Physics so that graduates are prepared to enter a CAMPEP residency of their choice. The depth of coverage of the core topics specified by these Graduate Standards are assessed based on the course materials provided by the program. These

Ceore topic courses will, for example, typically require at leastbout 18 semester credit hours or more to provide adequate depth of coverage. A typical university requires in excess of 30 credit hours of didactic courses to fulfill graduate degree (M.S., Ph.D.) requirements. Additional courses provided by the graduate program to fulfill these degree requirements may vary widely from program to program. For example some programs may require graduate level physics courses, while others may offer advanced courses in medical physics, statistics, or other allied topics. These additional courses may be required, or elective, at the discretion of the program.

Typically, completion of a master's program will take two academic years. Significant deviations from this period should be justified.

## Thanks to all program directors for timely response to our request for data.

 The annual report is our primary method of gathering statistics for both CAMPEP and SDAMP.