Health Professions Education Program Outcomes, 2013-2022





2024

Health Professions Education Program Outcomes, 2013-2022

August 2024



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# PREFACE

This report uses data from the Integrated Postsecondary Education Data System (IPEDS) to describe outcomes for 32 health professions education programs between the years 2013 and 2022. It contains information on the number of awards conferred and the gender and race/ethnicity of individuals completing the programs.

This report was prepared by Jinman Pang and David Armstrong of the Health Workforce Technical Assistance Center (HWTAC).

HWTAC was established in 2013 to support the efforts of the National Center for Health Workforce Analysis (NCHWA) and it provides technical assistance to states and organizations that engage in health workforce planning. HWTAC conducts several projects each year designed to provide expert assistance with health workforce data collection, analysis, and dissemination. HWTAC is based at the Center for Health Workforce Studies (CHWS) at the School of Public Health, University at Albany, State University of New York.

HWTAC is supported by the Health Resources and Services Administration (HRSA) of the US Department of Health and Human Services (HHS) as part of an award totaling \$450,000 with 0% financed with nongovernmental sources. The contents in this compendium are those of the authors and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the US Government. For more information, visit <u>https://www.hrsa.gov</u>.

August 2024

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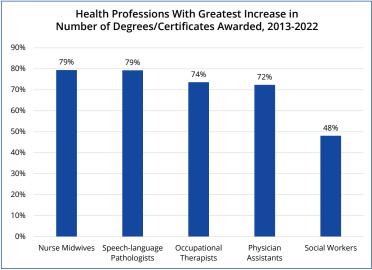
# INTRODUCTION

A robust and diverse supply of new health professionals is essential for our health care delivery system. The health care needs of the population are continuously changing due to factors such as population growth, aging, and the increasing prevalence of chronic diseases. To meet this rising demand and ensure that all individuals have access to timely and adequate care, a sufficient number of health professionals is necessary. A diverse and well-distributed workforce ensures that health care services are accessible in all geographic areas, including underserved rural and urban communities. Furthermore, diversity among health professionals can lead to better health outcomes. Diverse teams bring varied perspectives and insights that enhance patient care, foster trust, and improve communication with patients from different backgrounds.

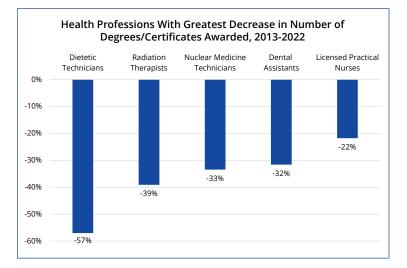
This report uses Integrated Postsecondary Education Data System (IPEDS) data to describe outcomes for 32 health professions education programs between the years 2013 and 2022. For each health profession, the number of degrees awarded, and the gender and race/ethnicity of the individuals completing the programs are displayed. Information for the year 2022 is considered preliminary. Information on the CIP Codes and award levels used to identify each health profession is reported in the footer of each page. Descriptions of award level codes can be found in the Appendix.

# **KEY FINDINGS**

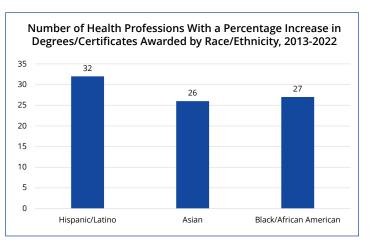
- The number of degrees/certificates awarded increased for the majority of health professions
  between 2013 and 2022
  - The professions that experienced the greatest percentage *increase* in the number of degrees/certificates awarded included nurse midwives, speech-language pathologists, occupational therapists, physician assistants, and social workers



 The professions that experienced the greatest percentage *decrease* in the number of degrees/certificates awarded included dietetic technicians, radiation therapists, nuclear medicine technicians, dental assistants, and licensed practical nurses



- The percentage of female graduates increased for 26 of 32 health professions between 2013 and 2022
- Between 2013 and 2022, all health professions became more racially/ethnically diverse
  - The percentage of Hispanic/Latinos increased for all 32 professions
  - The percentage of Asians increased for 26 professions
  - The percentage of Blacks/African Americans increased for 27 professions



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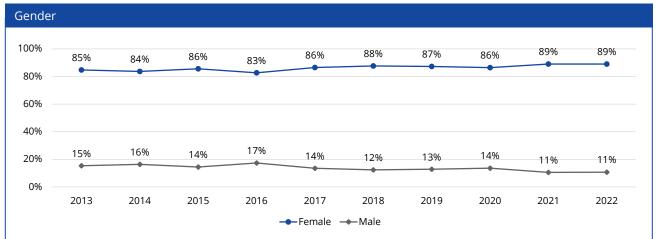
# PROFESSIONS

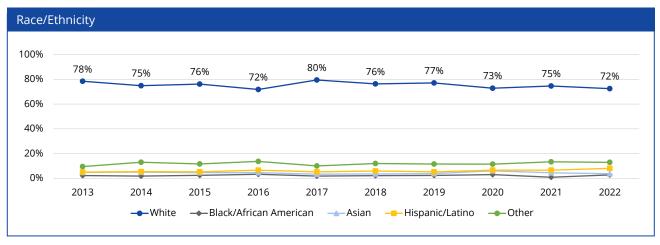
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Total Number of Degrees/Certificates Awarded



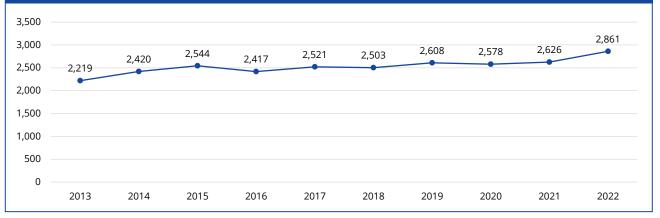


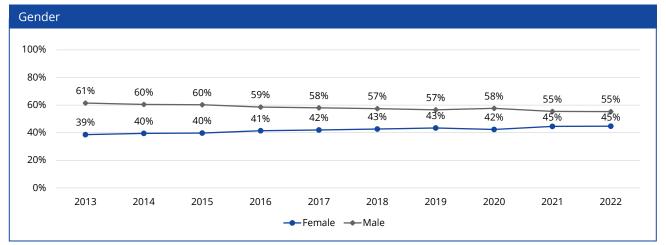


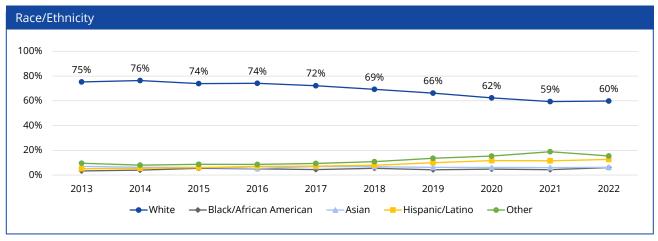
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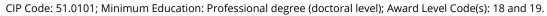


Total Number of Degrees/Certificates Awarded



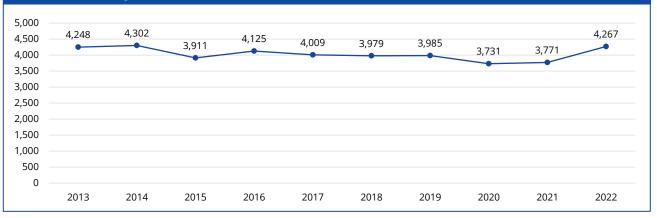


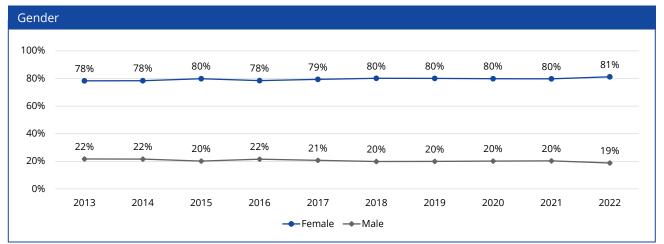


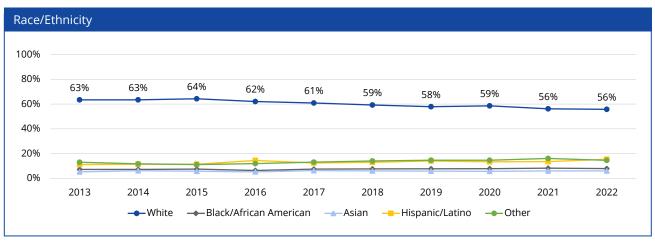




Total Number of Degrees/Certificates Awarded





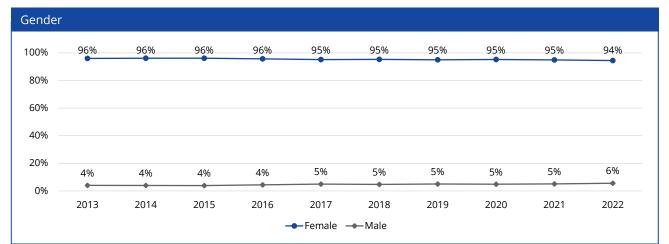


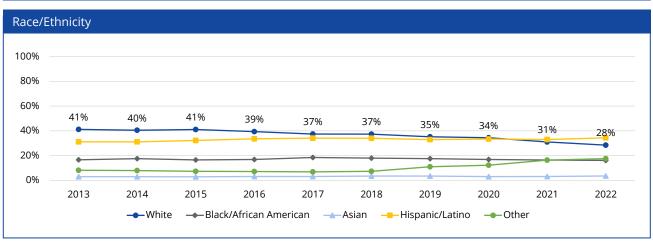
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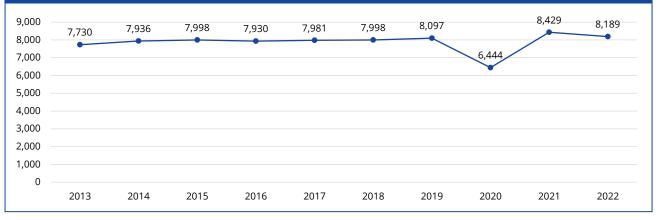


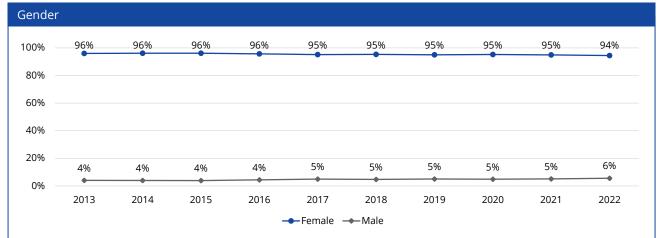


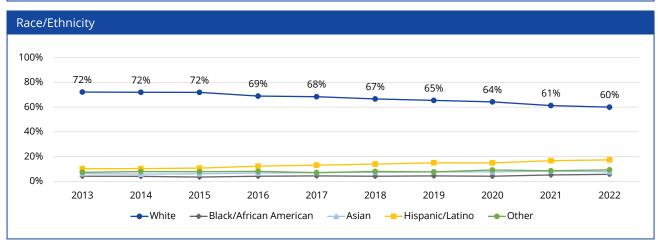




#### Total Number of Degrees/Certificates Awarded





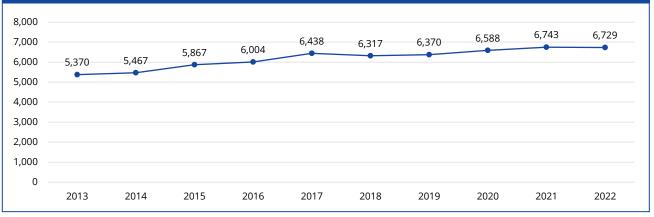


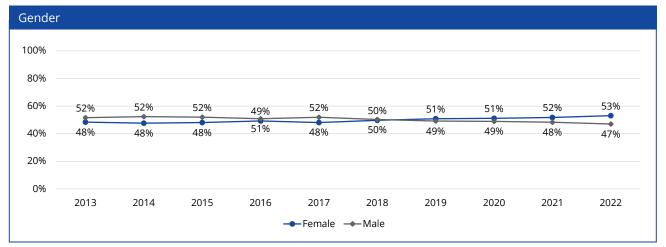
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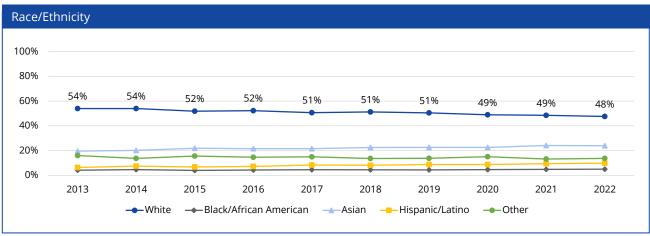
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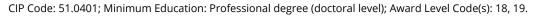


Total Number of Degrees/Certificates Awarded



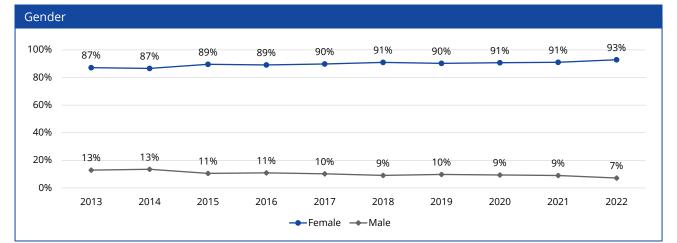


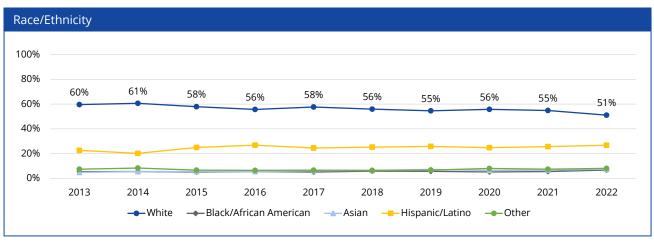






Total Number of Degrees/Certificates Awarded 5,569 6,000 4,933 4,852 4,765 4,789 5,000 4,478 4,563 4,390 4,205 4,177 4,000 3,000 2,000 1,000 0 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

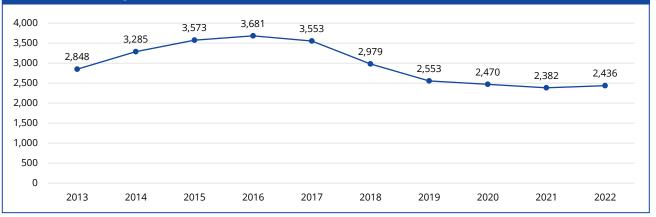


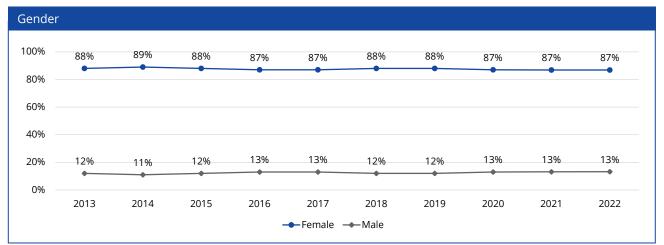


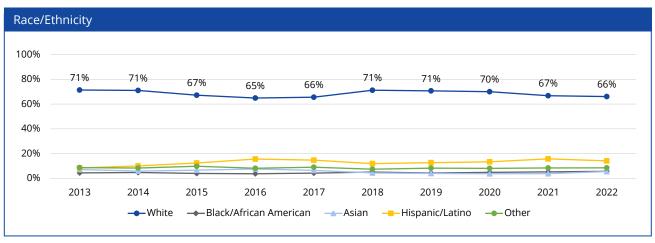
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#### Total Number of Degrees/Certificates Awarded



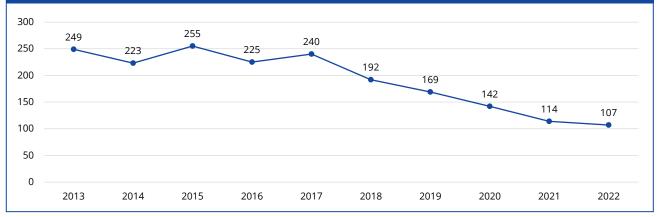


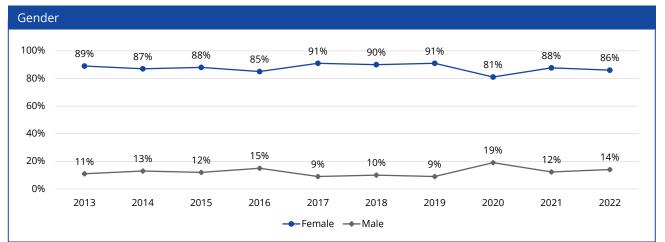


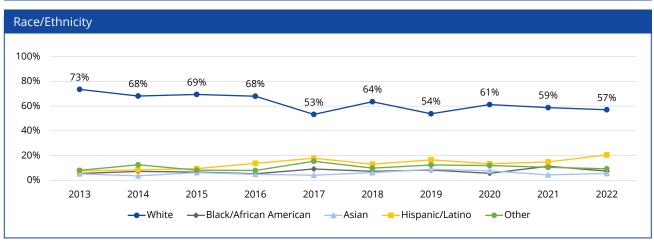
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Total Number of Degrees/Certificates Awarded





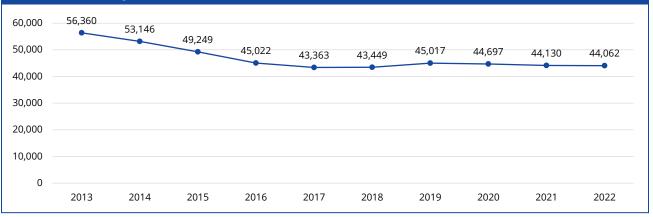


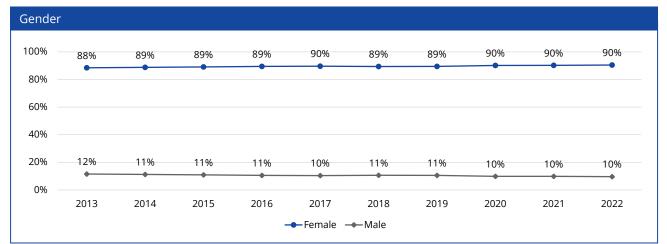
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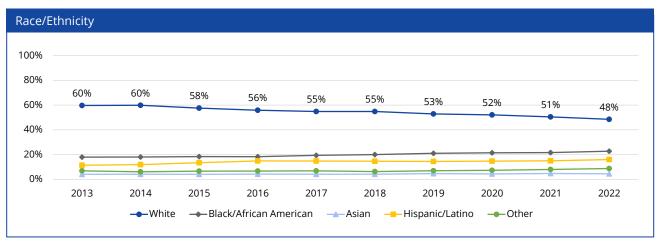
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Total Number of Degrees/Certificates Awarded





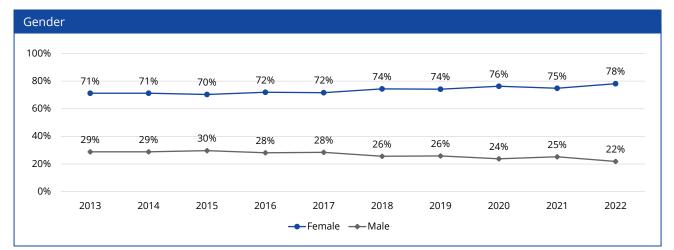


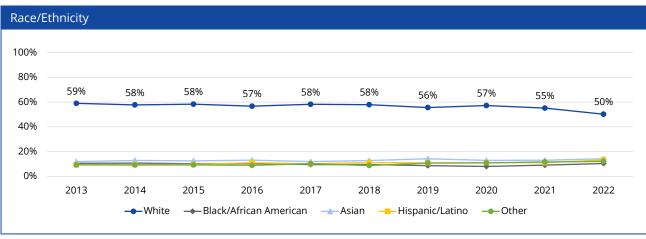


# MEDICAL AND CLINICAL LABORATORY TECHNOLOGISTS



Total Number of Degrees/Certificates Awarded 3,500 3,104 3,133 3,037 2,996 2,918 2,923 2,975 2,944 2,765 3,000 2,734 2,500 2,000 1,500 1,000 500 0 2013 2015 2014 2016 2017 2018 2019 2020 2021 2022



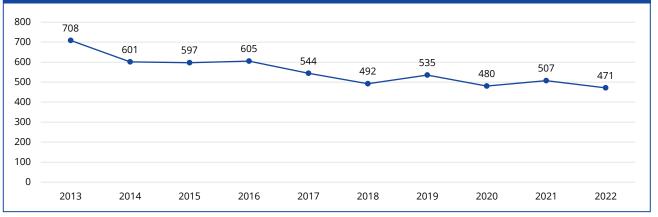


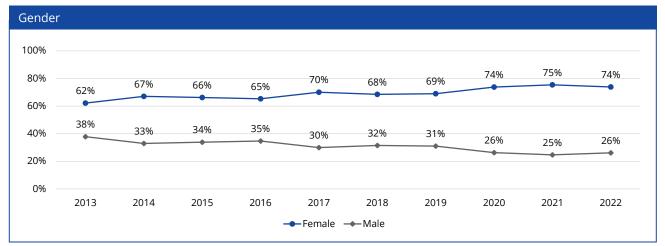
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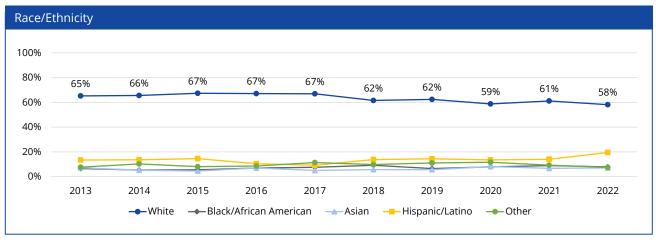
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# NUCLEAR MEDICINE TECHNICIANS

#### Total Number of Degrees/Certificates Awarded



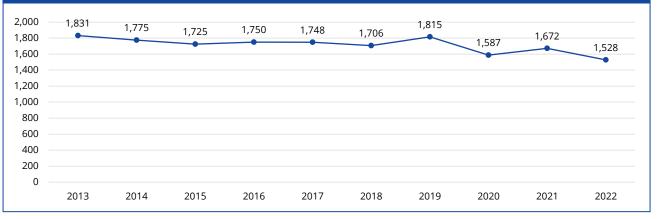


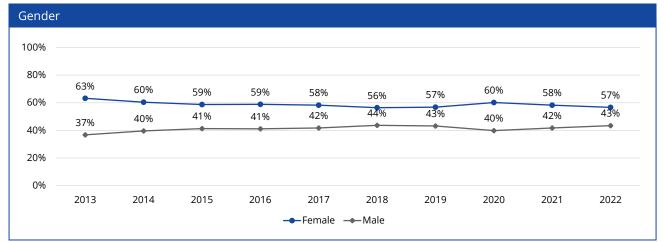


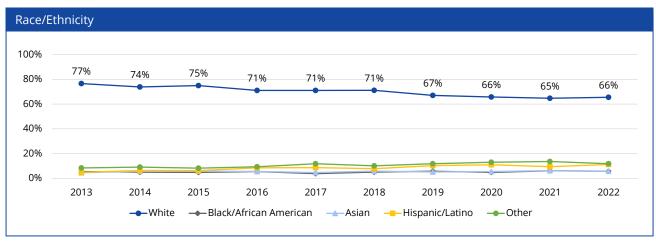
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Total Number of Degrees/Certificates Awarded



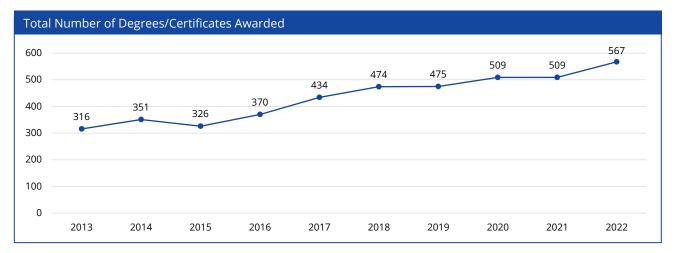


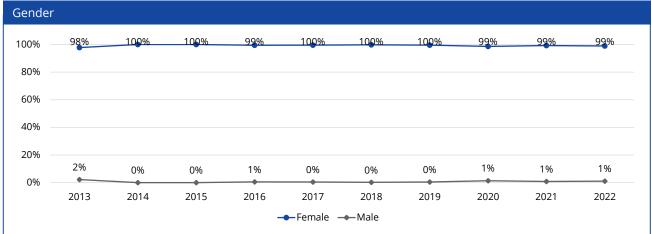


CIP Code: 51.3804; Minimum Education: Professional degree (master's level); Award Level Code(s): 7, 8, 18, 19.

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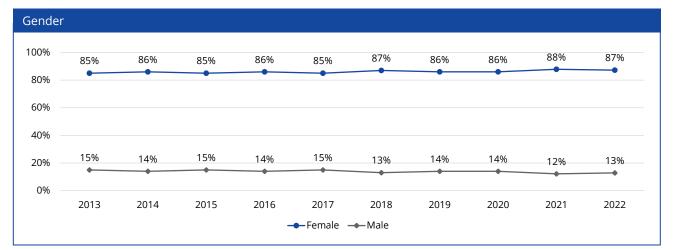
Race/Ethnicity 100% 83% 80% 77% 77% 77% 73% 72% 71% 80% 71% 69% 60% 40% 20% 8 0% 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 ---White ----Black/African American ----Hispanic/Latino ---Other 📥 Asian

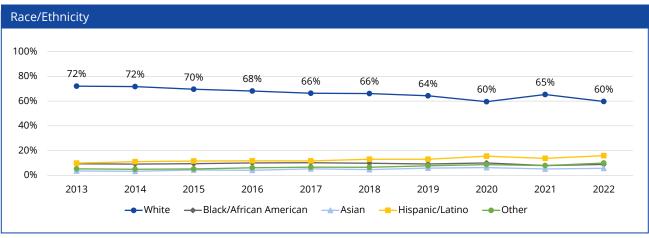
CIP Code: 51.3807; Minimum Education: Professional degree (master's level); Award Level Code(s): 7, 8, 18, 19.

## OCCUPATIONAL THERAPY ASSISTANTS



Total Number of Degrees/Certificates Awarded 6,000 5,415 5,086 4,863 4,855 4,759 4,725 5,000 4,444 4,436 4,302 4,000 3,559 3,000 2,000 1,000 0 2013 2014 2015 2017 2018 2016 2019 2020 2021 2022



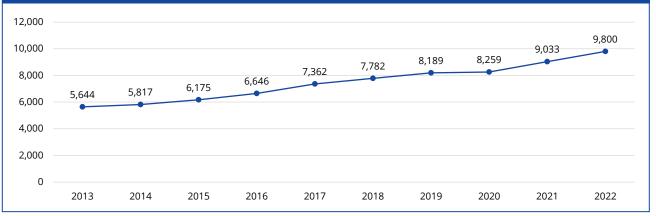


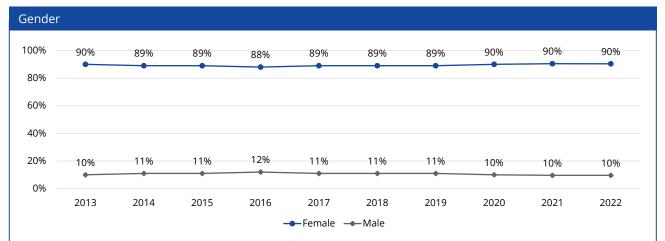
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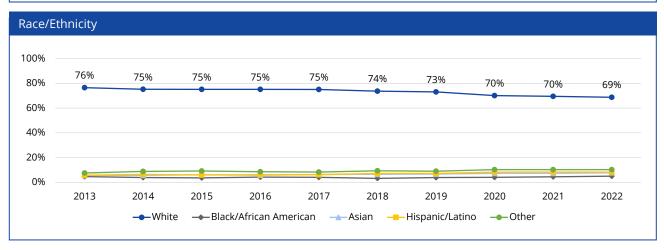
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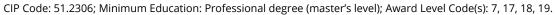


Total Number of Degrees/Certificates Awarded



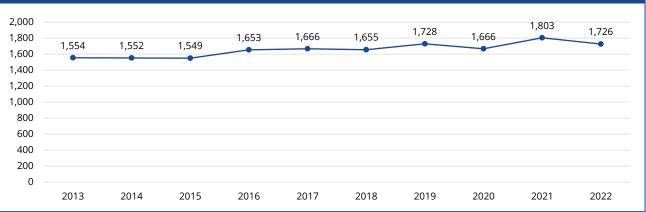


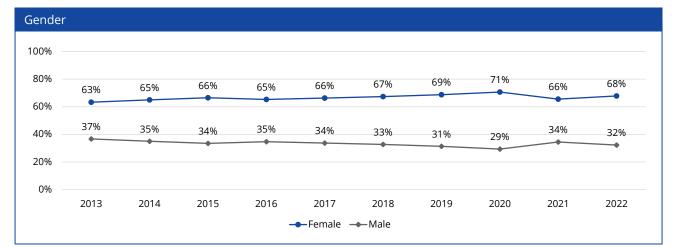


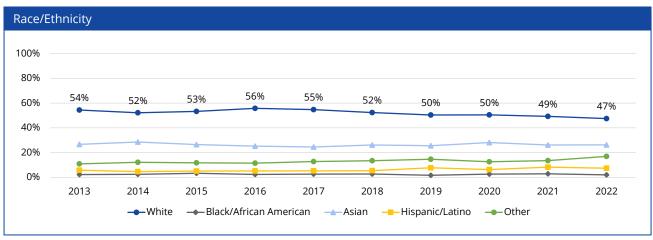




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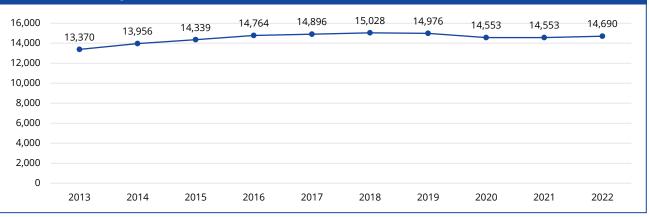


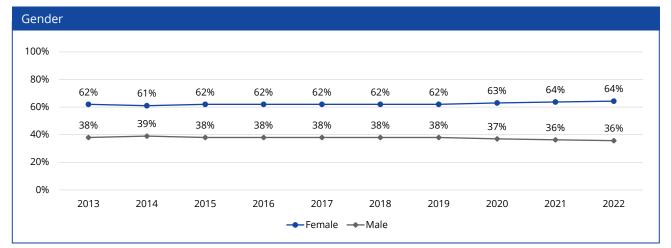


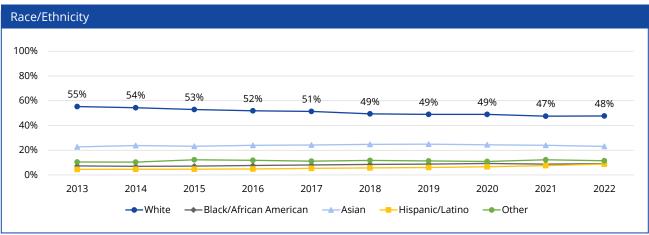
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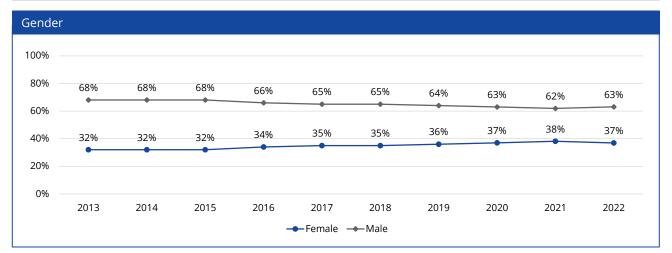


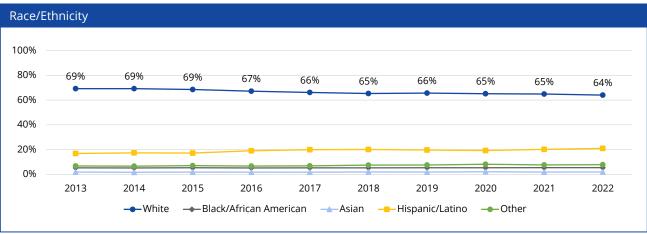






Total Number of Degrees/Certificates Awarded 28,428 28,503 30,000 27,312 26,911 26,845 26,196 26,174 26,259 25,888 25,232 • 25,000 20,000 15,000 10,000 5,000 0 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022



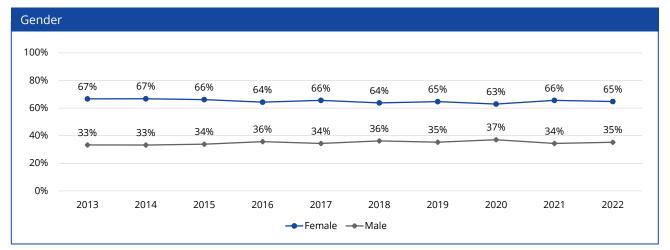


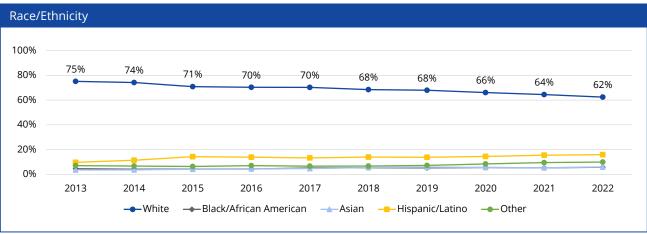
CIP Code: 51.0904; Minimum Education: Post-secondary certificate; Award Level Code(s): 1, 2, 3, 20, 21.

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Total Number of Degrees/Certificates Awarded 8,000 7,253 7,223 7,035 7,112 7,108 6,897 6,579 7,000 6,158 6,171 5,595 6,000 5,000 4,000 3,000 2,000 1,000 0 2013 2014 2015 2016 2017 2018 2019 2021 2020 2022

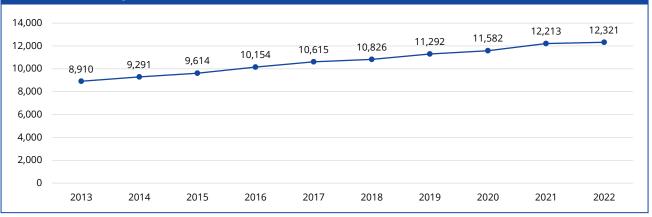


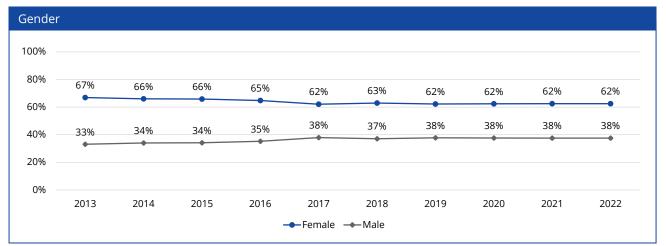


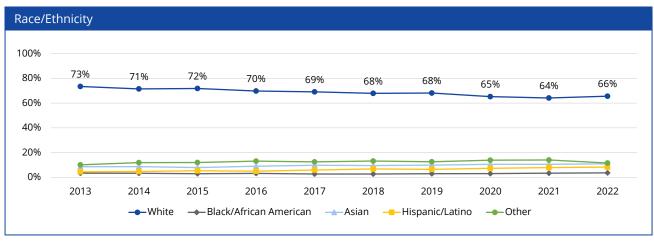
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Total Number of Degrees/Certificates Awarded





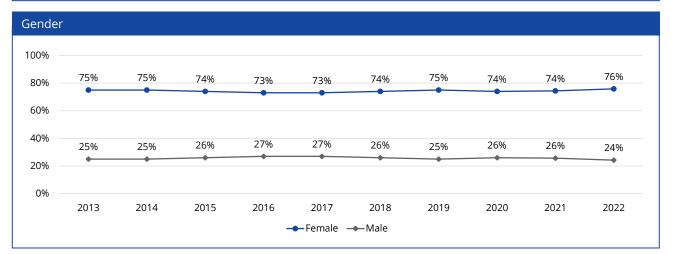


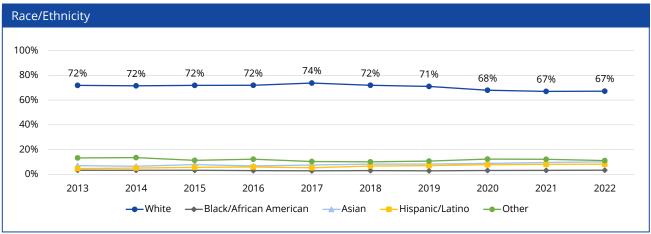
CIP Code: 51.2308; Minimum Education: Professional degree (doctoral level); Award Level Code(s): 18, 19.

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Total Number of Degrees/Certificates Awarded 12,000 11,364 10,801 10,142 9,732 9,110 10,000 8,562 8,239 7,651 8,000 7,055 6,592 6,000 4,000 2,000 0 2013 2014 2015 2016 2021 2017 2018 2019 2020 2022

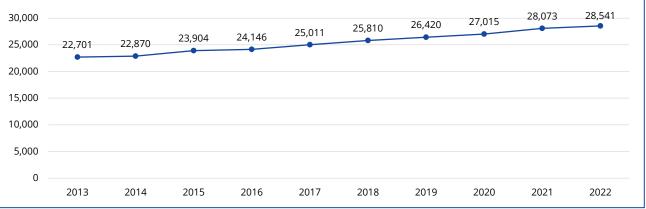


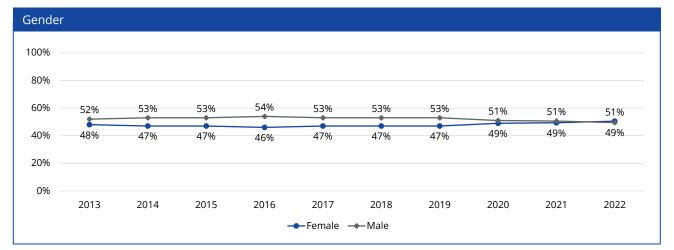


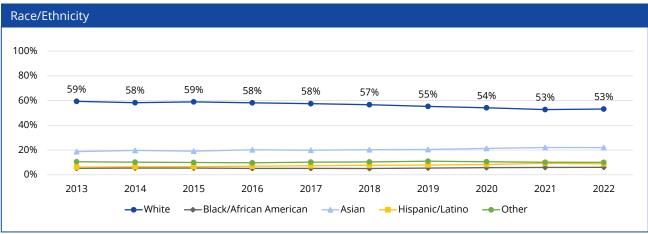
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Total Number of Degrees/Certificates Awarded





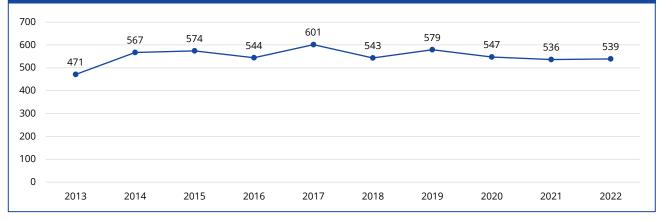


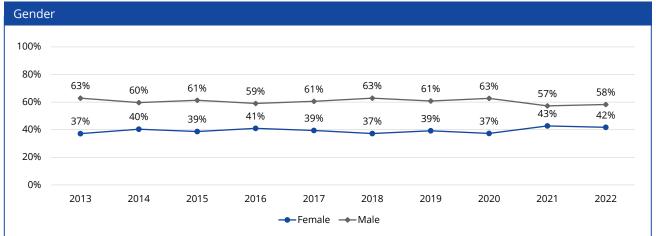
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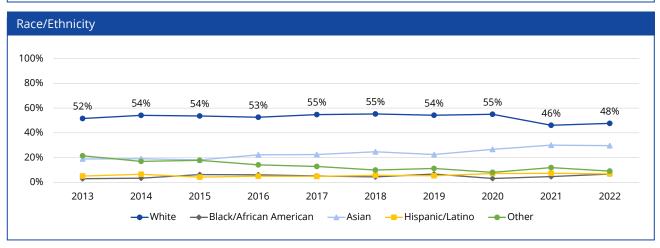
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Total Number of Degrees/Certificates Awarded







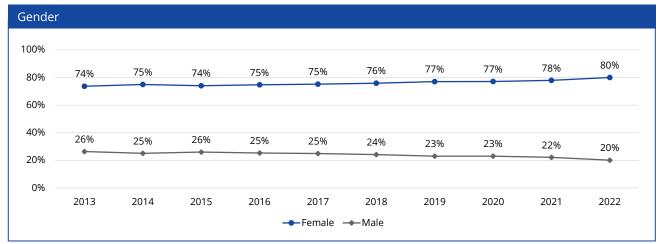
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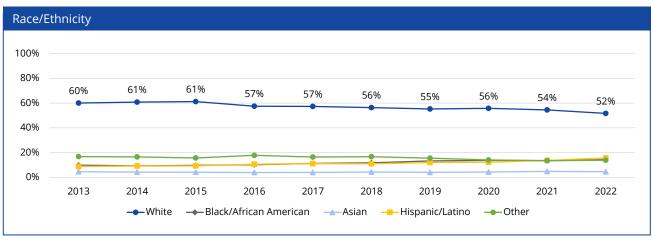
*Health Professions Education Program Outcomes, 2013-2022* 



Total Number of Degrees/Certificates Awarded





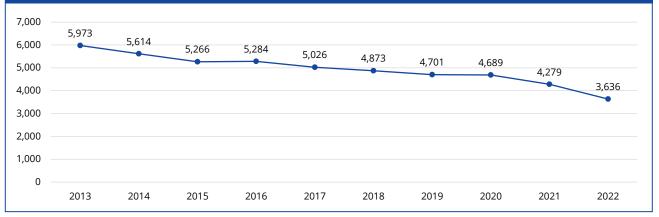


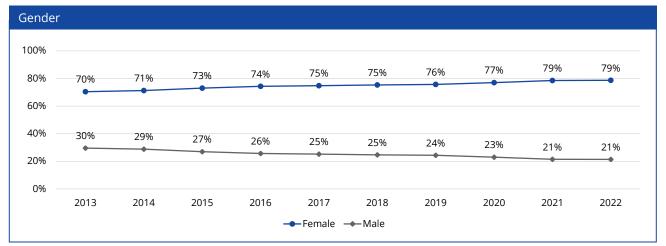
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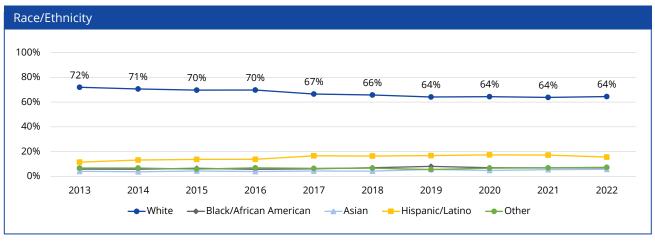
Health Workforce Technical Assistance Center



Total Number of Degrees/Certificates Awarded





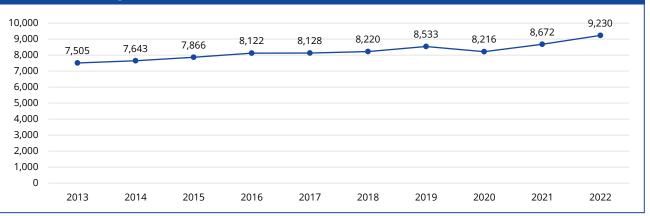


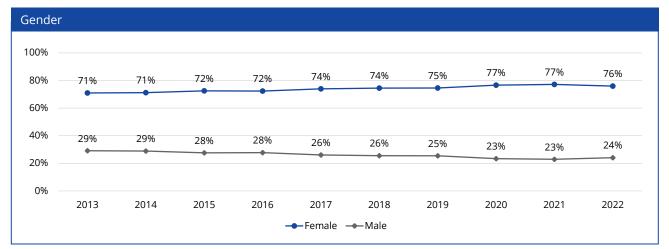
CIP Code: 51.0907; Minimum Education: Associate's degree; Award Level Code(s): 3, 5.

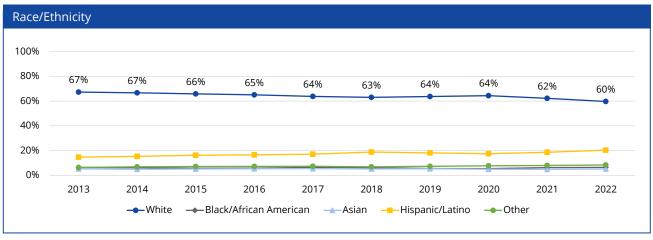
## RADIOLOGIC TECHNOLOGISTS AND TECHNICIANS



#### Total Number of Degrees/Certificates Awarded





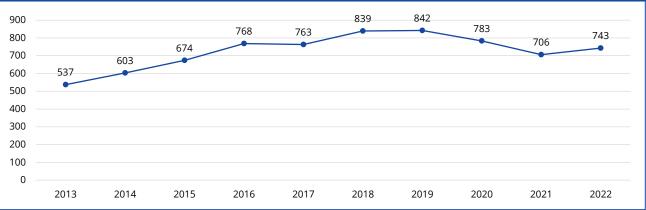


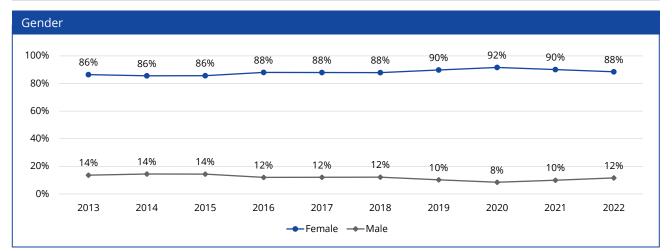
CIP Code: 51.0911; Minimum Education: Associate's degree; Award Level Code(s): 3, 4, 5.

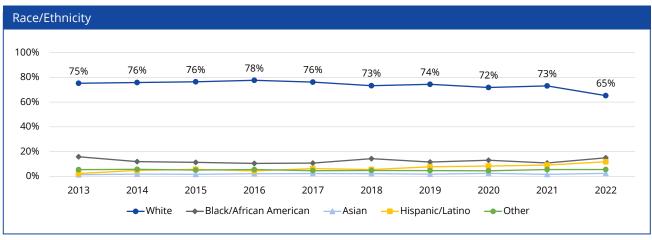
### RECREATIONAL THERAPISTS

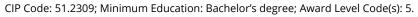


Total Number of Degrees/Certificates Awarded



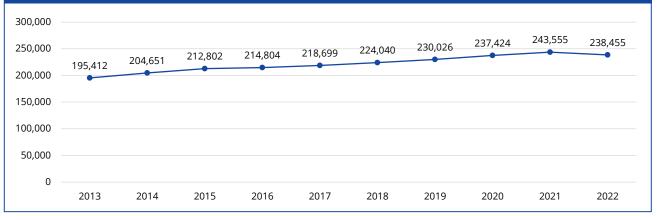


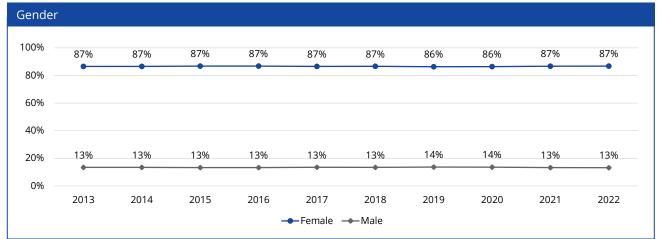


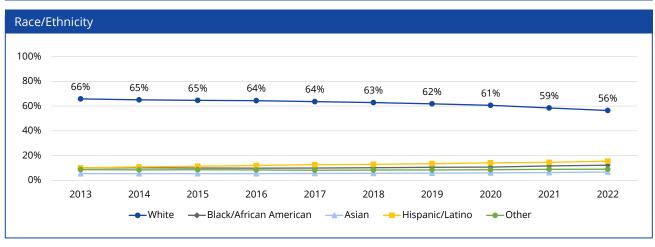




Total Number of Degrees/Certificates Awarded





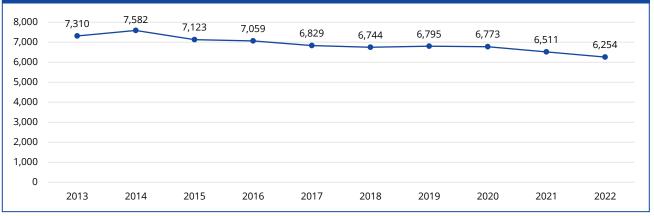


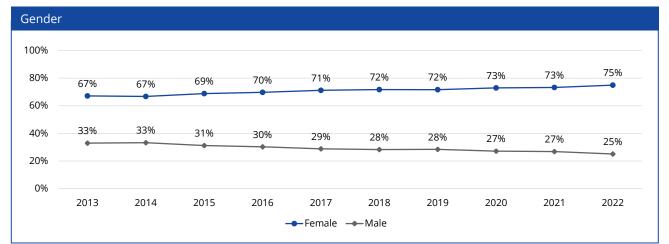
CIP Code: 51.3801; Minimum Education: Associate's degree; Award Level Code(s): 3, 4, 5.

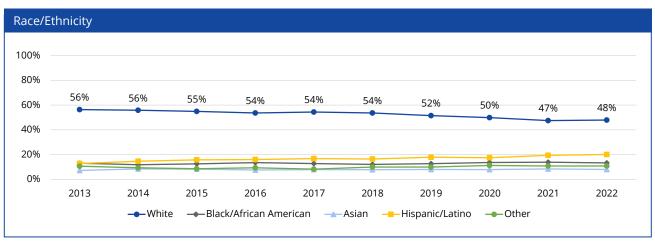
Health Workforce Technical Assistance Center



Total Number of Degrees/Certificates Awarded



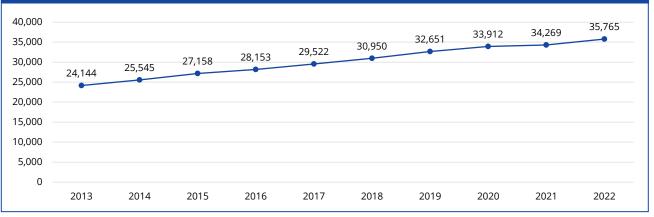


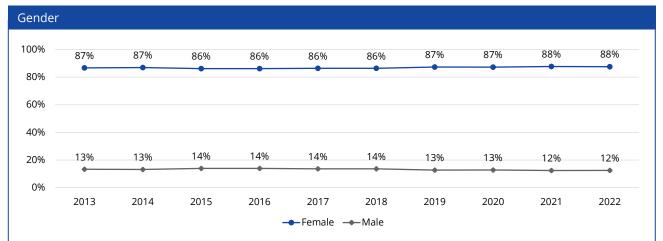


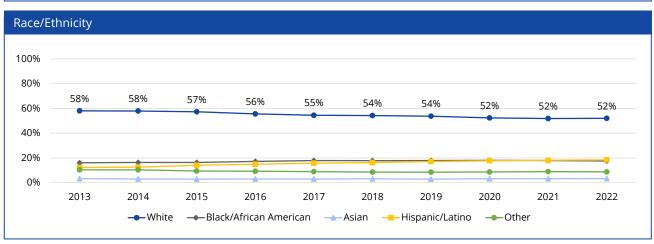




#### Total Number of Degrees/Certificates Awarded



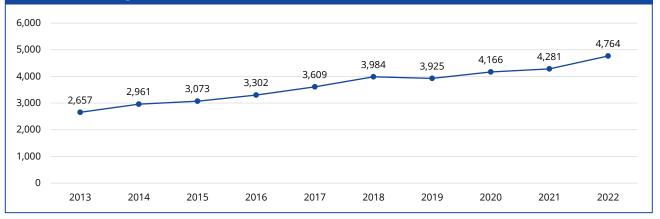


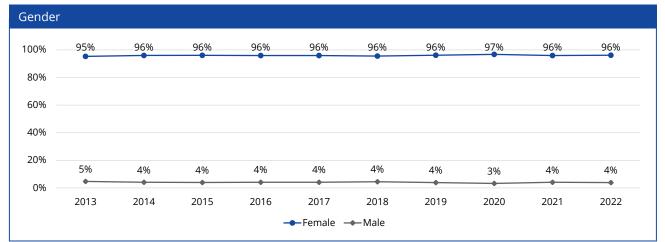


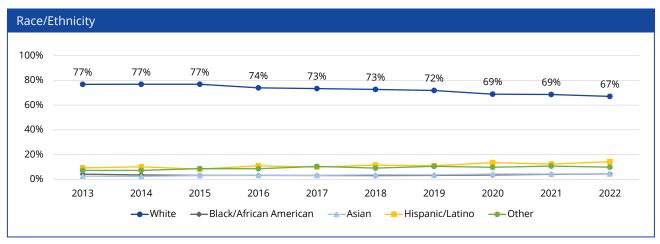
CIP Code: 51.1503; 44.0701; 44.0702; 44.0799; Minimum Education: Professional degree (master's level); Award Level Code(s): 7.

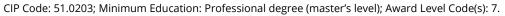


Total Number of Degrees/Certificates Awarded









# APPENDIX

#### TABLE A-1. CIP Codes, Minimum Education Requirements, and Award Level Codes by Profession

Occupation	CIP Code	Minimum Education	Award Level Codes
Audiologists	51.0202	Professional degree (doctoral level)	18, 19
Chiropractors	51.0101	Professional degree (doctoral level)	18, 19
Clinical Psychologists	42.2801	Professional degree (master's level)	7, 8, 18, 19
Dental Assistants	51.0601	Post-secondary certificate	1, 2, 3, 4, 5, 20, 21
Dental Hygienists	51.0602	Associate's degree	3, 5
Dentists	51.0401	Professional degree (doctoral level)	18, 19
Diagnostic Medical Sonographers	51.0910	Associate's degree	3, 4, 5
Dietitians and Nutritionists	51.3101 51.3102	Bachelor's degree	5
Dietetic Technicians	51.3103	Associate's degree	3
Licensed Practical Nurses	51.3901	Post-secondary certificate	1, 2, 3, 20, 21
Medical and Clinical Laboratory Technologists	51.1005	Bachelor's degree	5
Nuclear Medicine Technicians	51.0905	Associate's degree	3, 5
Nurse Anesthetists	51.3804	Professional degree (master's level)	7, 8, 18, 19
Nurse Midwives	51.3807	Professional degree (master's level)	7, 8, 18, 19
Occupational Therapy Assistants	51.0803	Associate's degree	3
Occupational Therapists	51.2306	Professional degree (master's level)	7, 17, 18, 19
Optometrists	51.1701	Professional degree (doctoral level)	18, 19
Pharmacists	51.2001	Professional degree (doctoral level)	18, 19
Paramedics/Emergency Medical Technicians	51.0904	Post-secondary certificate	1, 2, 3, 20, 21
Physical Therapist Assistants	51.0806	Associate's degree	3
Physical Therapists	51.2308	Professional degree (doctoral level)	18, 19
Physician Assistants	51.0912	Professional degree (master's level)	5, 7
Physicians	51.1201 51.1202 51.1901	Professional degree (doctoral level)	18, 19
Podiatrists	51.1203 51.2101	Professional	18, 19
Psychologists	42.0101	Professional degree (master's level)	7, 8, 18, 19

#### TABLE A-1. CIP Codes, Minimum Education Requirements, and Award Level Codes by Profession (cont.)

Occupation	CIP Code	Minimum Education	Award Level Codes
Radiation Therapists	51.0907	Associate's degree	3, 5
Radiologic Technologists and Technicians	51.0911	Associate's degree	3, 4, 5
Recreational Therapists	51.2309	Bachelor's degree	5
Registered Nurses	51.3801	Associate's degree	3, 4, 5
Respiratory Therapists	51.0908	Associate's degree	3, 5
Social Workers	51.1503 44.0701 44.0702 44.0799	Professional degree (master's level)	7
Speech-language Pathologists	51.0203	Professional degree (master's level)	7

#### **Award Level Codes**

- 1 Award of less than 1 academic year
- 2 Award of at least 1 but less than 2 academic years
- 3 Associate's degree
- 4 Award of at least 2 but less than 4 academic years
- 5 Bachelor's degree
- 6 Postbaccalaureate certificate
- 7 Master's degree
- 8 Post-master's certificate
- 17 Doctor's degree research/scholarship
- 18 Doctor's degree professional practice
- 19 Doctor's degree other
- 20 Certificates of less than 12 weeks
- 21 Certificates of at least 12 weeks but less than 1 year

# **ABOUT THE AUTHORS**



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Dr. Pang conducts data analysis, updates federal data sources, and conducts literature reviews, among other tasks as needed. Dr. Pang specializes in health econometrics, applied microeconomics, data analysis, modeling, and forecasting. She has PhD in Economics from the University at Albany.



#### David Armstrong, PhD

#### Director, Health Workforce Technical Assistance Center

Dr. David Armstrong manages the day-to-day operations of HWTAC and provides direct assistance to states and organizations engaged in health workforce planning. Dr. Armstrong has an extensive background in conducting health workforce studies. He has presented nationwide and produced dozens of reports on the health care workforce in New York and the US. He has a doctorate in sociology from the University at Albany, SUNY and has worked in the field of health workforce studies since 2003.



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