

Demographic Trends Among Applicants to a Pediatric Dentistry Program 2015-2020



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INTRODUCTION
<p>Pediatric dentistry is currently the most popular dental specialty by applicants participating in MATCH¹, with 744 applicants to pediatric dentistry in 2021. This year, 440 positions were available, of which 63 (14.3%) were at NYU Langone Dental Medicine Postdoctoral Residency Programs in Pediatric Dentistry². This residency system and its 13 sites across the country, represent a significant proportion of graduating pediatric dentistry specialists.</p> <p>The demographics of the specialty are changing: between 2010 and 2016, female representation in pediatric dentistry increased more than in any other dental specialty³. Besides gender, changes in race and ethnicity, citizenship, country of origin, military service, and conviction history reflect intersecting layers of diversity in the dental field.</p> <p>Trends in these demographic fields can help inform policies to further increase diversity and promote inclusivity throughout the specialty.</p>
PURPOSE
<p>This study seeks to evaluate demographic trends for applicants to NYU Langone Dental Medicine Postdoctoral Residency Programs in Pediatric Dentistry from 2015-2016 to 2019-2020 application cycles. This study evaluated the following demographic characteristics:</p> <ul style="list-style-type: none">• Race and ethnicity• Age• Gender• Citizenship• Country of origin• Military service• History of convictions
METHODS
<p>Demographic data of 2,158 Postdoctoral Application Support Service (PASS) applicants were collected and reported for the aforementioned fields. Percentages were calculated and the data visualized. This data was compared against publicly available data for dental school graduates⁴.</p>

RESULTS					
Participant Characteristics					
	2015-2016 N=432	2016-2017 N=435	2017-2018 N=428	2018-2019 N=421	2019-2020 N=442
Age (years)	29.1 (4.5)	29.4 (4.9)	29.5 (4.9)	29.2 (4.7)	29.2 (4.9)
Age Group (years)					
18-29	273 (63.2)	270 (62.1)	262 (61.2)	261 (62.0)	292 (66.1)
30+	159 (36.8)	165 (37.9)	166 (38.8)	160 (38.0)	150 (33.9)
Race					
White	211 (48.8)	213 (49.0)	190 (44.4)	187 (44.4)	228 (51.6)
Black	29 (6.7)	41 (9.4)	50 (11.7)	45 (10.7)	40 (9.1)
Asian	155 (35.9)	142 (32.6)	157 (36.7)	140 (33.3)	131 (29.6)
Other, including Multi	44 (10.2)	51 (11.7)	32 (7.5)	54 (12.8)	50 (11.3)
Ethnicity					
Hispanic	25 (5.8)	35 (8.0)	33 (7.7)	42 (10.0)	46 (10.4)
Gender					
Male	149 (34.9)	126 (29.6)	119 (28.3)	127 (30.5)	144 (32.7)
Female	278 (65.1)	299 (70.4)	301 (71.7)	289 (69.5)	296 (67.3)
Country of birth					
US	291 (67.4)	291 (66.9)	269 (62.9)	292 (69.4)	410 (92.8)
Non-US	141 (32.6)	144 (33.1)	159 (37.1)	129 (30.6)	32 (7.2)
Citizenship					
US Citizen	385 (89.1)	397 (91.3)	377 (88.1)	380 (90.3)	410 (92.8)
US Permanent Resident	38 (8.8)	22 (5.1)	32 (7.5)	29 (6.9)	18 (4.1)
Foreign Citizen	9 (2.1)	16 (3.7)	19 (4.4)	12 (2.9)	14 (3.2)
Military Service					
No	413 (95.6)	416 (95.6)	410 (95.8)	407 (96.7)	431 (97.5)
Yes, US	16 (3.7)	16 (3.7)	16 (3.7)	14 (3.3)	11 (2.5)
Yes, non-US	3 (0.7)	3 (0.7)	2 (0.5)	0 (0.0)	0 (0.0)
History of Convictions					
Yes	11 (2.5)	2 (1.4)	7 (1.6)	6 (1.4)	0 (0.0)
No	421 (97.5)	429 (98.6)	421 (98.4)	415 (98.6)	442 (100.0)

Table 1. Demographics of applicants for each application cycle. Reports age as average age (standard deviation) and all others as number of applicants (percent of total applicants for cycle).

RESULTS																															
<div><div><p>Trend of race over time</p><table><caption>Trend of race over time</caption><tr><th>Admission Cycle</th><th>White</th><th>Asian</th><th>Other, including Multi</th><th>Black</th></tr><tr><td>2015-2016</td><td>49</td><td>36</td><td>10</td><td>7</td></tr><tr><td>2016-2017</td><td>49</td><td>33</td><td>11</td><td>9</td></tr><tr><td>2017-2018</td><td>45</td><td>37</td><td>8</td><td>11</td></tr><tr><td>2018-2019</td><td>45</td><td>34</td><td>12</td><td>9</td></tr><tr><td>2019-2020</td><td>51</td><td>30</td><td>11</td><td>9</td></tr></table></div><div><ul style="list-style-type: none">• Generally, demographics were relatively consistent• The number of applicants born outside the United States decreased significantly in 2019-2020• Although consistently low, applicants reporting convictions and military service decreased 2019-2020• Hispanic representation increased over the past two application cycles• When compared to dental school graduates, applicants to this program were consistently more likely to be women, Black, or Asian</div></div>	Admission Cycle	White	Asian	Other, including Multi	Black	2015-2016	49	36	10	7	2016-2017	49	33	11	9	2017-2018	45	37	8	11	2018-2019	45	34	12	9	2019-2020	51	30	11	9	
Admission Cycle	White	Asian	Other, including Multi	Black																											
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CONCLUSIONS																															
<p>This study demonstrates that age, gender, race, and citizenship have been relatively consistent amongst applicants, but for pediatric dentistry to remain an inclusive specialty, it will be important to encourage underrepresented groups to continue to apply using targeted programming.</p> <p>This program’s applicant pool is more female, Black, and Asian compared to United States dental school graduates and is demonstrating increasing Hispanic representation. Further studies on these demographic characteristics may provide further insights into what characteristics or strategies of this program have contributed to this difference.</p>																															
REFERENCES																															
<p>¹National Matching Services Inc., <i>Results of the Matching Program for 2021-2022 Positions</i>. https://natmatch.com/dentres/stats/2021sumstats.pdf</p> <p>²NYU Langone Health. Advanced Education in Pediatric Dentistry. https://www.nyulangonedental.org/programs/pediatric. Accessed 8/27/21.</p> <p>³Surdu S, Mertz E, Langelier M, Moore J. Dental Workforce Trends: A National Study of Gender Diversity and Practice Patterns. Med Care Res Rev. 2021 Feb;78(1_suppl):30S-39S. doi: 10.1177/1077558720952667. Epub 2020 Aug 28. PMID: 32856551.</p> <p>⁴Comission on Dental Accreditation. “Survey of Advanced Dental Education for 2019-2020”. Survey. 2020.</p>																															