



2021 Resident Salaries Offered through the VIRMP Association of American Veterinary Medical Colleges April, 2021

Introduction

According to the annual Senior Surveys conducted by the American Veterinary Medical Association (AVMA) only 2.1% percent of 2019 graduates intended to pursue residencies immediately after completing their DVM degree. (Bain, Hansen, Ouedraogo, Radich & Salois, 2020). Such programs are typically pursued after 1 to 2 years of internship training.

Historically, post-DVM training programs have paid salaries far lower than the national average for recent graduates. In 2020, AVMA reported new graduate veterinarians earned an average annual full-time salary of \$70,045 (Bain, et al 2020). The AVMA report goes on to report an average salary of roughly \$40,000 for DVMs in residency programs across the United States; for residents specifically entering training programs at academic institutions the mean salary was \$35,098 (Greenhill, 2020).

In an effort to broaden the profession's understanding of trainee salaries, the AAVMC has partnered with the American Association of Veterinary Clinicians (AAVC) to study residencies offered through its matching program. This publication focuses exclusively on salaries for residency programs in the United States.

Methodology

The American Association of Veterinary Clinicians (AAVC) sponsors the annual Veterinary Internship and Residency Matching Program (VIRMP). The purpose of the program is to "expedite the selection of interns and residencies for participating veterinary colleges and private veterinary practices." (AAVC, 2021). The VIRMP allows academic institutions and private practices to submit training positions to be filled and applicants to submit their applications and rankings to the VIRMP. Program coordinators review the applications and rank the applicants. Proprietary software used by the VIRMP determines the best matches based on the rankings and notifies the applicants and the program coordinators.

This process begins annually in September of each year when the training program coordinators from individual residency and internship training programs enter their program information into the matching program's website (www.virmp.org). Program coordinators enter detailed information about the positions being offered; the salary being offered is entered as a free-text field.

In the spring of 2021, this data was provided to AAVMC for analysis. Prior to analysis, all free text entered salary information was standardized using US currency formatting. Residency position offerings were sorted by clinical and non-clinical types; clinical positions were again sorted by practice area. The position entry data included the state location and the name of the institution offering each position. These data were organized using regional variables and a descriptive variable indicating whether the practice was located at an academic institution or a private practice.

Descriptive and ANOVA analyses were conducted using SPSS 22.

Definitions

There are two kinds of residents, non-clinical and clinical residents. Non-Clinical residents are defined as individuals involved in basic science training programs. Clinical residents are defined as individuals involved in a three-year advanced training program in a specialty area in veterinary medicine. This training may or may not lead to a specialty board certification and may or may not be embedded within a graduate program.

Summary of Findings for Resident Positions Filled through the Match Program

The number of first year residency positions offered at academic institutions within the United States through the VIRMP for the 202-2022 training year was 329 which is fewer than the number of positions offered over the previous cycle (341). A total of 49 academic institutions offered these positions.

For resident positions included in this analysis, the average starting salary was \$37,375 or 6.5% higher than the mean salary offered in 2020. Academic residency positions listed through the matching program were most often located in the South (35.0%) and Midwest (31.9%). Although only 14.9% of residents are expected to train in the Western region this year, that region continues to offer the highest starting salary of all listed resident positions at \$41,221, which is \$3,846 more than the national average. This statistically significant difference ($p < .001$) is likely attributable to differences in the cost of living across regions. For example, as of April 26, 2021, residents training in Davis, California will pay 46.9% more in rent than residents in Baton Rouge, Louisiana (Numbeo.com, 2021). A breakdown of average salary by region can be found in Table 1, while a per state breakdown can be found in Table 2.

Region	Percentage of Positions Listed	N of Positions Listed	Mean	Median
Midwest	31.9%	105	\$34,960	\$31,500
Northeast	18.2%	60	\$41,113	\$38,002
South	35.0%	115	\$35,990	\$33,000
West	14.9%	49	\$41,221	\$44,786
Total	100.00%	329	\$37,375	\$36,000

State	Percentage of All Positions	N of All Positions	Mean	Median
Alabama	4.3%	14	\$31,350	\$31,350
California	7.3%	24	\$46,970	\$44,786
Colorado	3.0%	10	\$33,250	\$32,500
Connecticut	0.9%	3	\$45,333	\$42,000
Florida	5.5%	18	\$39,100	\$39,100
Georgia	6.1%	20	\$35,613	\$32,631
Illinois	3.0%	10	\$36,854	\$35,093
Indiana	3.0%	10	\$31,500	\$31,500
Iowa	1.2%	4	\$29,000	\$29,000
Kansas	1.8%	6	\$35,885	\$35,885
Louisiana	3.0%	10	\$36,257	\$30,708
Maryland	0.6%	2	\$50,004	\$50,004
Massachusetts	4.9%	16	\$39,502	\$38,002
Michigan	4.0%	13	\$42,932	\$40,000
Minnesota	4.6%	15	\$33,400	\$31,000
Mississippi	1.8%	6	\$33,600	\$33,600
Missouri	3.6%	12	\$34,176	\$28,000
New Jersey	0.6%	2	\$55,000	\$55,000
New York	5.2%	17	\$45,057	\$40,425
North Carolina	5.2%	17	\$37,500	\$36,000
Ohio	3.6%	12	\$38,893	\$38,112
Oklahoma	0.6%	2	\$43,561	\$43,561
Oregon	1.2%	4	\$39,402	\$39,402
Pennsylvania	6.7%	22	\$37,400	\$36,000
Tennessee	3.3%	11	\$34,318	\$33,000
Texas	4.6%	15	\$32,455	\$30,478
Virginia	1.8%	6	\$38,737	\$37,284
Washington	3.3%	11	\$36,721	\$31,716
Wisconsin	5.2%	17	\$30,500	\$30,500
Total	100.0%	329	\$37,375	\$36,000

Twenty-three different practice areas were represented in the match data with a mean salary range of \$32,950 (radiation oncology/therapy) to \$50,763 (laboratory animal medicine/comparative medicine). It is important to differentiate between clinical and non-clinical trainees as the salary offers differ significantly and directly impacts this range.

Non-clinical residencies in laboratory medicine/comparative medicine represented 14.6% of positions offered through the match program. Salaries offered for these training positions were significantly more than their clinical resident counterparts participating in the matching program ($p < .001$). As noted earlier, applicants to these non-clinical programs were offered positions with an average starting

salary of \$50,763, while applicants to clinical residency programs were offered \$35,088 or 30.9% less in salary.

Table 3 shows the mean residency salary offerings by practice area. Positions in laboratory animal/comparative medicine comprised the largest single group of offerings by positions. Positions in ambulatory, avian medicine, ophthalmology, and herd medicine/agricultural practices/herd production offered the least number of positions in the VIRMP, 0.3% each.

Table 3

Average Salary Offered for Academic Residency Positions by Practice Area

Practice Area	% of Positions	N of Positions	Mean	Median
Ambulatory	0.3%	1	\$37,284	\$37,284
Anesthesia	5.5%	18	\$34,469	\$35,568
Avian Medicine	0.3%	1	\$33,000	\$33,000
Cardiology	2.7%	9	\$36,393	\$36,000
Clinical Nutrition	0.9%	3	\$36,262	\$36,000
Dentistry	1.2%	4	\$35,572	\$33,500
Dermatology	1.8%	6	\$33,430	\$32,566
Diagnostic Imaging And Radiology	5.8%	19	\$34,599	\$33,600
Emergency Medicine/Critical Care	12.8%	42	\$35,234	\$35,546
Equine Medicine	2.1%	7	\$36,530	\$35,093
Equine Surgery	2.4%	8	\$37,159	\$36,944
Exotic/Wildlife/Zoo	0.6%	2	\$41,943	\$41,943
Food Animal Medicine And Surgery	1.5%	5	\$36,054	\$35,885
Herd Medicine/Agricultural Practices/Herd Production	0.3%	1	\$44,786	\$44,786
Laboratory Animal/Comparative Medicine	14.6%	48	\$50,763	\$50,139
Medicine - Large Animal	4.6%	15	\$35,380	\$35,568
Medicine - Small Animal	12.5%	41	\$35,312	\$35,093
Neurology/Neurosurgery	4.6%	15	\$35,147	\$33,600
Oncology	5.5%	18	\$34,505	\$33,000
Ophthalmology	0.3%	1	\$40,000	\$40,000
Radiation Oncology/Therapy	3.0%	10	\$32,950	\$32,000
Sports Medicine And Rehabilitation	0.9%	3	\$34,700	\$33,000
Surgery - Large Animal	2.7%	9	\$34,137	\$32,500
Surgery - Small Animal	9.4%	31	\$34,439	\$33,600
Theriogenology	1.5%	5	\$32,943	\$31,350
Zoological Medicine	2.1%	7	\$36,169	\$35,093
Total	100.0%	329	\$37,375	\$36,000

An analysis of application requirements revealed that 75.7% of residency positions required at least one previous year of internship or comparable experience. Residencies without an experiential requirement had mean salary offers that were 22.5% higher than salaries requiring previous experience. (Table 4).

Table 4

Average Salary Offered for Academic Residency Positions by Experience Requirements				
Previous Experience Requirements	Percentage of Positions Listed	N of Positions Listed	Mean Salary	Median Salary
No Previous Internship Required	24.3%	80	\$45,045	\$45,000
Previous Internship Required	75.7%	249	\$34,911	\$33,000
Total	100.0%	329	\$37,375	\$36,000

Limitations

The salary data acquired from the VIRMP only represents a portion of available residency and intern positions offered in the United States. It is unclear how many positions are offered to new and recent graduates of the professional DVM program. Because of this, the authors are unable to claim that this data is wholly definitive of the salary ranges that may be offered to residents in the United States. That said, all academic residency positions are offered exclusively through the VIRMP, making this data set representative of this specific population.

Conclusion

Residents are offered salaries that roughly less than half the national average salary earned by new graduates, however, there is a wide range of salaries within those offered. Overall, resident salaries increased by 6.5% when compared to those offered in 2020. Finally, salaries and residencies are influenced by numerous things including location and practice area.

Acknowledgements

The AAVMC acknowledges the contributions of the staff of the VIRMP for providing access to the match data.

References

Cost of Living. Numbeo, n.d. Web. 2 April, 2021.

Bain, Bridgette; Hanson, Charlotte, Ouedraogo, Frederic, Radich, Rosemary, and Salois, Matt. *2020 AVMA Report Economic State of the Veterinary Profession*. Schaumburg: American Veterinary Medical Association, August 2020.

Greenhill, Lisa M. "2020 Resident and Intern Salaries Offered through the VIRMP." Association of American Veterinary Medical Colleges, May, 2020. Web.

Please cite as:

Polisetti, Sraavya and Lisa Greenhill. "2021 Resident Salaries Offered through the VIRMP." Association of American Veterinary Medical Colleges. April, 2021. Web.