

**2018 Internship Salaries Offered through the VIRMP
Association of American Veterinary Medical Colleges
June, 2018
(Corrected September, 2018)**

Introduction

According to the annual Senior Surveys conducted by the American Veterinary Medical Association (AVMA) 31.6% percent of 2016 graduates pursued additional training by internship (Dicks, Bain, & Knippenberg, 2017). Recent graduates report receiving additional hands on training and mentoring, as well as pursuing specialized experience as reasons for pursuing internships. A smaller number of these professionals go on to pursue residency training with the goal of earning additional degrees and/or board certification.

Historically, post-DVM training programs have paid salaries far lower than the national average for recent graduates. In 2017, AVMA reported new graduate veterinarians earned an average annual salary of \$73,380 for 2016 graduates (Dicks, Knippenberg, Bain & Greenhill 2017). The Association of American Veterinary Medical Colleges (AAVMC) reported an average salary of \$32,103 for first year residents in training programs in the United States (Greenhill & Young, 2017).

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 the full complement of residencies and internships offered through a matching program. This publication focuses exclusively on first year salaries for internship 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, 2018). 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 2018, 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 or practice 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

Clinical interns are defined as individuals participating in a one year rotating or specialty clinical training program in veterinary medicine. The internship provides practical experience in applying knowledge gained during formal professional education and offers the opportunity for recent graduates to obtain additional training.

Summary of Findings for Internship Positions Filled through the Match Program

The number of internship positions offered in the United States through the VIRMP for the 2018-2019 training year was 1,317 across 215 employment sites; 316 (24.0%) of these positions were offered by 28 academic institutions. Overall, this represented a 5% increase in the total number of internship positions offered through the VIMRP this year. For all listed intern positions, the average starting salary was \$33,738, a 5.1% increase over the previous year’s salary of \$32,103. There was a statistical difference between positions offered in academic or private settings, with privately offered internship applicants being offered \$35,618 and academically offered internship applicants being offered \$27,782 or 22.0% less (p=.000).

Internship positions listed through the matching program were most often located in the South (34.7%) and Northeast (23.8%). Although only 25.5% of interns are expected to train in the Western region this year, that region continues to offer the highest starting salary of all listed intern positions at \$39,682 which is 17.5% more than the national average. This statistically significant difference (p = .000) is likely attributable to differences in the cost of living, including housing, across regions. A breakdown of average salary by region can be found in Table 1.

Table 1:
Average Salary Offered for Internship Positions by Region

| Region | Percentage of Positions Listed | Mean Salary | Median Salary |
|---------------|---------------------------------------|--------------------|----------------------|
| Midwest | 15.9% | \$31,187 | \$30,500 |
| Northeast | 23.8% | \$33,378 | \$32,000 |
| South | 34.7% | \$30,827 | \$30,500 |
| West | 25.5% | \$39,682 | \$40,800 |
| Total | 100.0% | \$33,738 | \$32,000 |

Internship match offerings were sorted into categories associated with specialty areas (Table 2).

Table 2:

Average Internship Salary Offered by Practice Type

| Area of Practice | Number of Positions Listed | Percentage of Positions Listed | Mean Salary | Median Salary |
|--|----------------------------|--------------------------------|-------------|---------------|
| Ambulatory | 2 | .2% | \$29,800 | \$29,800 |
| Anesthesiology | 3 | .2% | \$26,771 | \$26,660 |
| Avian | 10 | .8% | \$30,126 | \$30,000 |
| Cardiology | 4 | .3% | \$38,824 | \$39,267 |
| Community Practice | 15 | 1.1% | \$39,622 | \$40,000 |
| Dermatology | 2 | .2% | \$29,077 | \$29,077 |
| Diagnostic Imaging & Radiology | 3 | .2% | \$35,673 | \$32,000 |
| Emergency Medicine/Critical Care | 116 | 8.8% | \$36,542 | \$35,000 |
| Equine | 25 | 1.9% | \$27,293 | \$26,500 |
| Exotic Medicine/Zoo | 18 | 1.4% | \$28,895 | \$30,165 |
| Farm Practice/Production Animal medicine | 1 | .1% | \$27,000 | \$27,000 |
| Food Animal | 9 | .7% | \$27,659 | \$28,000 |
| Large Animal Medicine/Surgery | 13 | 1.0% | \$27,306 | \$26,885 |
| Large Animal Surgery | 4 | .3% | \$27,259 | \$26,950 |
| Neurology | 26 | 2.0% | \$34,281 | \$32,000 |
| Oncology | 22 | 1.7% | \$30,775 | \$30,000 |
| Ophthalmology | 3 | .2% | \$31,387 | \$30,500 |
| Other | 6 | .5% | \$28,875 | \$30,000 |
| Shelter Medicine | 17 | 1.3% | \$34,159 | \$31,500 |
| Small Animal Internal Medicine | 26 | 2.0% | \$34,838 | \$32,500 |
| Small Animal Medicine/Surgery | 883 | 67.0% | \$34,043 | \$32,000 |
| Small Animal Surgery | 106 | 8.0% | \$32,778 | \$31,000 |
| Sports Medicine/Rehabilitation | 3 | .2% | \$31,667 | \$32,000 |
| Total | 1317 | 100.0% | \$33,780 | \$32,000 |

Although salaries within the sample ranged from \$13,000 per year up to \$50,000 per year, average salary offers across practice areas largely clustered in the low \$30,000 range. Positions for internships in Small Animal Medicine/Surgery comprised the single largest group of positions listed (67.0%). Although most salary offers were fairly close to the mean, statistically significant differences were found across practice areas ($p=.000$). These differences may well be mitigated by the very small sample sizes within practice categories. Internships in Community Practice offered the highest mean salary offer of \$39,622, which is more than 17.3% more than the national average.

Academic Positions

There were 316 internship positions offered through the VIRMP for the 2018-2019 training year. As noted earlier, the mean salary offered by the academic institutions for internship positions was \$27,782. The largest share of positions were offered at colleges in the South and Midwest (Table 3). Higher internship salaries were offered by colleges in the West and Northeast regions by 12.7% and 3.8%, respectively.

Table 3:

Average Salary Offered for Academic Internship Positions by Region

| Region | Percentage of Positions Listed | Mean Salary | Median Salary |
|-----------|--------------------------------|-------------|---------------|
| Midwest | 31.0% | \$26,887 | \$26,153 |
| Northeast | 16.8% | \$28,922 | \$26,548 |
| South | 42.1% | \$27,308 | \$26,660 |
| West | 10.1% | \$31,398 | \$31,134 |
| Total | 100.0% | \$27,862 | \$26,660 |

Mean salaries by state are shown in Table 4.

Table 4:

Average Salary Offered for Academic Internship Positions by State

| State | Mean | Median | N | % of Total N |
|---------------|----------|----------|----|--------------|
| Alabama | \$25,769 | \$26,000 | 13 | 4.1% |
| Arizona | \$35,000 | \$35,000 | 4 | 1.3% |
| California | \$39,871 | \$42,216 | 5 | 1.6% |
| Colorado | \$29,038 | \$28,000 | 13 | 4.1% |
| Florida | \$30,500 | \$30,500 | 14 | 4.4% |
| Georgia | \$28,588 | \$28,588 | 12 | 3.8% |
| Illinois | \$26,153 | \$26,153 | 18 | 5.7% |
| Indiana | \$27,050 | \$27,050 | 7 | 2.2% |
| Iowa | \$26,000 | \$26,000 | 8 | 2.5% |
| Kansas | \$32,774 | \$32,774 | 10 | 3.2% |
| Louisiana | \$26,278 | \$26,660 | 17 | 5.4% |
| Massachusetts | \$26,908 | \$26,548 | 21 | 6.6% |
| Michigan | \$25,000 | \$25,000 | 7 | 2.2% |
| Minnesota | \$27,000 | \$27,000 | 13 | 4.1% |
| Mississippi | \$24,000 | \$24,000 | 10 | 3.2% |
| Missouri | \$26,000 | \$26,000 | 15 | 4.7% |

| | | | | |
|----------------|----------|----------|-----|--------|
| New York | \$34,600 | \$34,600 | 13 | 4.1% |
| North Carolina | \$30,000 | \$30,000 | 22 | 7.0% |
| Ohio | \$25,655 | \$25,655 | 12 | 3.8% |
| Oklahoma | \$26,700 | \$26,500 | 10 | 3.2% |
| Oregon | \$31,776 | \$31,776 | 5 | 1.6% |
| Pennsylvania | \$27,263 | \$26,500 | 19 | 6.0% |
| Tennessee | \$25,000 | \$25,000 | 13 | 4.1% |
| Texas | \$26,394 | \$26,147 | 13 | 4.1% |
| Virginia | \$27,222 | \$27,000 | 9 | 2.8% |
| Washington | \$25,801 | \$25,801 | 5 | 1.6% |
| Wisconsin | \$26,900 | \$26,900 | 8 | 2.5% |
| Total | \$27,782 | \$26,660 | 316 | 100.0% |

An analysis of application requirements revealed that 13.3% of intern positions required at least one previous year's internship or comparable experience. These requirements are positively correlated with salary offers (P=.000). Mean salary offers featuring experience requirements were 5.5% higher than salaries without the requirement (Table 5).

Table 5:

| Average Salary Offered for Academic Internship Positions by Experience Requirements | | | |
|--|---------------------------------------|--------------------|----------------------|
| Previous Experience Requirements | Percentage of Positions Listed | Mean Salary | Median Salary |
| No Previous Internship Required | 86.7% | \$27,627 | \$26,660 |
| Previous Internship Required | 13.3% | \$29,394 | \$27,500 |
| Total | 100.0% | \$27,782 | \$26,660 |

An analysis of position offerings by practice area reveals that the bulk of positions are in Small Animal Medicine/Surgery. The single cardiology internship position offered the highest mean salary of \$32,774, which is 17.6% higher than the national average. Salary differences across practice areas were statistically significant (P=.013); Table 6 shows the mean salaries offered by practice area.

Table 6:

| Average Salary Offered for Academic Internship Positions by Practice Area | | | |
|--|---------------------------------------|-------------|---------------|
| Practice Area | Percentage of Positions Listed | Mean | Median |
| Ambulatory | .6% | \$29,800 | \$29,800 |
| Anesthesiology | .9% | \$26,771 | \$26,660 |
| Avian | .6% | \$27,000 | \$27,000 |
| Cardiology | .3% | \$32,774 | \$32,774 |
| Community Practice | .3% | \$26,548 | \$26,548 |
| Dermatology | .3% | \$26,153 | \$26,153 |
| Emergency Medicine/Critical Care | 6.0% | \$30,398 | \$26,660 |
| Equine | 6.6% | \$27,253 | \$26,548 |
| Exotic Medicine/Zoo | 3.8% | \$29,634 | \$30,165 |
| Farm Practice/Production Animal medicine | .3% | \$27,000 | \$27,000 |
| Food Animal | 2.8% | \$27,659 | \$28,000 |
| Large Animal Medicine/Surgery | 4.1% | \$27,306 | \$26,885 |
| Large Animal Surgery | 1.3% | \$27,259 | \$26,950 |
| Neurology | .9% | \$25,985 | \$26,000 |
| Oncology | 3.8% | \$27,281 | \$25,728 |
| Ophthalmology | .3% | \$26,160 | \$26,160 |
| Other | .6% | \$26,624 | \$26,624 |
| Shelter Medicine | 2.2% | \$30,787 | \$30,500 |
| Small Animal Internal Medicine | 1.3% | \$26,185 | \$26,077 |
| Small Animal Medicine/Surgery | 59.5% | \$27,574 | \$26,604 |
| Small Animal Surgery | 2.5% | \$28,456 | \$26,824 |
| Sports Medicine/Rehabilitation | .6% | \$31,500 | \$31,500 |
| Total | 100.0% | \$27,782 | \$26,660 |

Limitations

The salary data acquired from the VIRMP only represents a portion of available internship 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 these data are wholly definitive of the salary ranges that may be offered to residents in the United States.

Conclusion

Interns are offered salaries less than half the national average salary earned by new graduates, however, there is a wide range of salaries within those offered. Finally, salaries are influenced by numerous things including location, practice area and whether the position is offered by an academic institution or a private practice.

Acknowledgements

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

References

Dicks, Michael R., Bridgette Bain, and Ross Knippenberg. *2016 AVMA Report on Veterinary Markets*. Schaumburg: American Veterinary Medical Association, 2017. Print.

Dicks, Michael R., Ross Knippenberg, Bridgette Bain, and Lisa Greenhill. *2017 AVMA Report on the Market for Veterinary Education*. Schaumburg: American Veterinary Medical Association, 2017. Print.

Greenhill, Lisa M. "2016 Resident and Intern Salaries Offered through the VIRMP." Association of American Veterinary Medical Colleges, Sept. 2016. Web. 21 June 2017.

Please cite as:

Greenhill, Lisa M. and Kendall Young. "2018 Intern Salaries Offered through the VIRMP." Association of American Veterinary Medical Colleges. May, 2018. Web.