Facts & Figures

Employment, starting salaries, and educational indebtedness analyzed by gender for year-2020 graduates of US veterinary medical colleges

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n cooperation with the 30 US colleges and schools of veterinary medicine, the AVMA conducted its annual survey of fourth-year veterinary medical students in spring 2020. Surveys were sent to 3,243 veterinary students who were expected to graduate in the United States in spring 2020, and responses were received from 2,874 (88.6%; **Appendix**). Results reported here include an analysis according to gender; information on demographic characteristics and employment benefits is also provided. Of the students who responded to the survey, 493 (17.2%) were male and 2,381 (82.8%) were female. Base sizes in the present report vary because some respondents did not answer all questions.

At the time of expected graduation, 493 male and 2,381 female respondents reported a mean age of 28.4 and 28.0, respectively. Also, 76.8% (378/492) of male respondents indicated that they were single, 21.7% (107/492) married, and 1.4% (7/492) divorced, and 76.4% (1,815/2,377) of female respondents indicated that they were single, 21.8% (517/2,377) married, 1.8% (43/2,377) divorced, and 0.1% (2/2,377) widowed. Finally, 9.3% (46/492) of the male and 3.2% (76/2,377) of the female respondents reported that they had children.

Employment Preferences, Offers, and Acceptances

At the time of the survey, 98.9% (2,843/2,874) of respondents reported that they had accepted a job offer or were currently seeking employment in veterinary medicine or enrollment in an advanced education program. The remaining respondents (1.1% [31]) indicated that they had not accepted a job offer or were not actively seeking such positions. Respondents seeking veterinary positions were asked to indicate their top 3 employment preferences, and 490 male and 2,371 female respondents answered the question. Employment preferences were similar for male and female respondents; 66.9% (328/490) of male and 66.1% (1,567/2,371) of female respondents

indicated that their first choice was to secure employment in private practice. Also, 3.9% (19/490) of male and 4.4% (104/2,371) of female respondents indicated that their first choice was to work in public practice, and 28.8% (141/490) of male and 29.2% (692/2,371) of female respondents indicated that their first choice was to pursue advanced education. Lastly, 0.4% (2/490) of male and 0.3% (8/2,371) of female respondents indicated that their first choice was to work in a segment of veterinary medicine identified as "other."

Among respondents who accepted a job offer or were currently seeking job offers, similar percentages of male and female respondents (male, 93.6% [452/483]; female, 94.0% [2,218/2,360]) received \geq 1 offer of employment or an advanced education position. Of the 445 male respondents who reported the number of offers received, 180 (40.4 %) received 1 offer, 90 (20.2%) received 2 offers, 74 (16.6%) received 3 offers, and 101 (22.7%) received \geq 4 offers. Of the 2,198 female respondents who reported the number of offers received, 902 (41.0%) received 1 offer, 525 (23.9%) received 2 offers, 394 (17.9%) received 3 offers, and 377 (17.2%) received \geq 4 offers. Mean (median) number of offers for male respondents was 2.6 (2) and for female respondents was 2.4(2).

Regarding the type of position accepted, 63.3% (286/452) of male and 63.9% (1,417/2,218) of female respondents accepted a position in veterinary medicine; 28.3% (128/452) of male and 29.4% (651/2,218) of female respondents accepted admission in an advanced education program (ie, internship, residency, or other academic program). Of the male and female respondents, 8.4% (38/452) and 6.8% (150/2,218), respectively, had not accepted a position in veterinary medicine or admission in an advanced education program; 8.2% (33/404) of male and 84.0% (1,722/2,050) of female respondents accepted employment or advanced education positions that were in the sector of their first choice.

The distribution of employment types among respondents who had accepted employment or ad-

Table I—Distribution of employment type by gender (male, n = 406; female, 2,053) for year-2020 graduates* of the 30 US veterinary medical colleges and schools.

Employment type	No. (%) of male respondents	No. (%) of female respondents
Private practice		
Food animal exclusive	14 (3.4)	15 (0.7)
Food animal predominant	17 (4.2)	32 (1.6)
Mixed animal	46 (11.3)	188 (9.2)
Companion animal exclusive	149 (36.7)	836 (40.7)
Companion animal predominant	36 (8.9)	235 (11.4)
Equine	4 (1.0)	26 (1.3)
All private practice	266 (65.5)	1,332 (64.9)
Public and corporate practice Federal government		
Civil service	2 (0.5)	18 (0.9)
Uniformed services	7 (1.7)	23 (1.1)
College or university (faculty or staff)	l (0.2)	3 (0.1)
State or local government	0 (0)	2 (0.1)
Industry-commercial	0 (0)	6 (0.3)
Not-for-profit	I (0.2)	13 (0.6)
Other	I (0.2)	5 (0.2)
All public and corporate practice	12 (3.0)	70 (3.4)
Advanced education program		
Master's degree†	2 (0.5)	7 (0.3)
PhD	7 (1.7)	15 (0.7)
Internship	107 (26.4)	568 (27.7)
Residency	11 (2.7)	47 (2.3)
Education, other	I (0.2)	9 (0.4)
Postdoctoral degree fellowship	0 (0)	5 (0.2)
All advanced education program	128 (31.5)	651 (31.7)

*Surveys were sent to 3,243 veterinary medical students expected to graduate from the 30 US veterinary colleges or schools in spring 2020, and responses were received from 2,874. The number of respondents who accepted a position in practice or in an advanced education program was 2,459. †Master's degree included Master of Preventive Medicine (male, n = 1; female, 1), Master of Public Health (0; 5), and Master of Science (1; 1).

vanced education positions was determined **(Table I)**. Types of employment accepted most often by male respondents were exclusive companion animal practice (36.7%), internship (26.4%), and mixed animal practice (11.3%). For female respondents, types of employment accepted most often were exclusive companion animal practice (40.7%), internship (27.7%), and predominant companion animal practice (11.4%).

Respondents entering internships were asked to provide their primary reason for undertaking an internship. Among the 104 male respondents, the primary reasons were as follows: plan to apply for a residency program (n = 64 [61.5%]), practice better-quality veterinary medicine (20; [19.2%]), believe need more training before entering veterinary practice (10 [9.6%]), believe desired position requires internship prior to employment (7 [6.7%]), and believe would earn more money in veterinary medicine by completing an internship (1 [1.0%]). Among the 554 female respondents, rankings of primary reasons were the same as those of male respondents and were as follows: plan to apply for a residency program (256 [46.2%]), practice better-quality veterinary medicine

(143 [25.8%]), believe need more training before entering veterinary practice (90 [16.2%]), believe desired position requires internship prior to employment (55 [9.9%]), and believe would earn more money in veterinary medicine by completing an internship (4 [0.7%]).

Of respondents entering private practice, 99.2% (260/262) of male and 99.7% (1,305/1,309) of female respondents indicated that they would be an employee rather than self-employed. Similarly, 99.8% (403/404) of male and 99.6% (2,038/2,047) of female respondents securing full-time or advanced education positions indicated that they expected to work full-time.

Base Starting Salary

Survey questions allowed respondents to indicate various means by which they expected to be compensated for work (eg, guaranteed salary or stipend with no option for production bonus, base salary or stipend with production bonus, or 100% production based). Respondents who accepted an offer of employment or advanced education were asked to indicate types of compensation expected.

Among the 403 male respondents reporting the means of compensation, 237 (58.8%) indicated that they would receive a guaranteed salary with no option for production bonus, 154 (38.2%) indicated that they would receive a base salary with a production bonus, 6 (1.5%) indicated that they would receive 100% production-based compensation, and 6 (1.5%) indicated that they did not know. Among the 2,046 female respondents indicating the means of compensation, 1,217 (59.5%) indicated that they would receive a guaranteed salary with no production bonus, 777 (38.0%) indicated that they would receive a base salary with production bonus, 11 (0.5%) indicated that they would receive 100% production-based compensation, and 41 (2.0%) indicated that they did not know the means of compensation. Mean compensation for male respondents with offers of employment in private practice (n = 265) was \$93,866 and for female respondents (1,328) was \$92,472 (**Table 2**). For those securing employment in public and corporate practice, mean compensation for male respondents (n = 12) was \$59,958 and for female respondents (70) was \$79,059. For respondents who secured advanced education positions (including internship and residency programs), mean compensation for male respondents (n = 125) was \$36,582 and for female respondents (640) was \$37,333.

Mean (median) hours per week that male and female respondents with offers of full-time employment were expected to work were 45 (42) and 44 (40), respectively. Mean (median) hours per week that male and female respondents with offers of advanced education programs were expected to work were 61 (60) and 63 (60), respectively.

Table 2—Mean full-time starting salaries of year-2020 graduates* of the 30 US veterinary medical colleges and schools, by gender and employment type.

		Male respondents	5	Female respondents		
Employment type	No. (%) accepting positions	Mean (SD) starting salary	No. reporting starting salary	No. (%) accepting positions	Mean (SD) starting salary	No. reporting starting salary
Private practice						
Food animal exclusive	14 (3.4)	88,457 (15,553)	14	15 (0.7)	87,500 (14,494)	15
Food animal predominant	17 (4.2)	86,441 (13,799)	17	32 (l.6)	79,910 (23,422)	31
Mixed animal	46 (11.3)	85,244 (12,789)	45	188 (9.2)	79,987 (12,348)	188
Companion animal exclusive	149 (36.7)	98,606 (23,623)	149	836 (40.7)	96,505 (19,895)	835
Companion animal predominant	36 (8.9)	92,731 (17,458)	36	235 (II. 4)	93,991 (19,125)	234
Equine	4 (1.0)	75,000 (34,881)	4	26 (I.3)	56,000 (21,114)	25
All private practice	266 (65.5)	93,866 (21,303)	265	1,332 (64.9)	92,472 (20,467)	1,328
Public and corporate practice						
Federal government						
Civil service	2 (0.5)	_	2	18 (0.9)	70,516 (7,887)	18
Uniformed services	7 (I.7)	9,714 (15,294)	7	23 (1.1)	68,727 (13,762)	23
College or university	I (0.2)	_` _	I	3 (0.1)	49,200 (31,089)	3
State or local government	0 (0)	0	0	2 (0.1)	_``	2
Industry-commercial	0 (0)	0	0	6 (0.3)	122,750 (26,940)	6
Not-for-profit	I (0.2)	_	I	13 (0.6)	93,538 (12,907)	13
Other	I (0.2)	_	I	5 (0.2)	78,800 (23,669)	5
All public and corporate practice	12 (3.0)	58,958 (16,060)	12	70 (3.4)	79,059 (23,284)	70
Advanced education program						
Master's degree†	2 (0.5)	_	I	7 (0.3)	48,167 (27,624)	3
PhD	7 (I.7)	28,857 (8,092)	7	15 (0.7)	37,532 (20,028)	15
Internship	107 (26.4)	36,257 (9,841)	105	568 (27.7)	36,466 (9,654)	564
Residency	11 (2.7)	41,973 (8,557)	11	47 (2.3)	42,058 (9,789)	47
Education, other	I (0.2)		I	9 (0.4)	56,972 (17,654)	6
Postdoctoral degree fellowship	0 (0)	0	0	5 (0.2)	58,800 (7,396)	5
All advanced education program	128 (31.5)	36,582 (10,272)	125	651 (31.7)	37,333 (10,633)	640
Total	406	75,012 (32,272)	402	2,053	74,693 (31,181)	2,038

^{— =} Not reported to protect confidentiality.

See Table I for remainder of key.

Additional Compensation and Benefits

Respondents were asked whether they would receive a signing bonus, moving allowance, compensation for handling cases on an emergency basis, housing allowance, or student loan repayment assistance (Table 3). They were also asked to report the dollar amount that they anticipated earning for these additional income streams. Of the 404 male respondents, 181 (44.8%) indicated that they would earn additional compensation, and of the 2,046 female respondents, 974 (47.6%) indicated that they would earn additional compensation. Among those who anticipated additional compensation, 60.2% (109/181) of male and 56.4% (549/974) of female respondents indicated that they would receive a signing bonus, and 33.1% (60/181) of male and 42.1% (410/974) of female respondents indicated that they would receive a moving allowance. Of the 181 male and 974 female respondents, 47 (26.0%) and 212 (21.8%), respectively, indicated that they would receive compensation for handling cases on an emergency basis. Additionally,

21 (11.6%) male and 79 (8.1%) female respondents indicated that they would receive a housing allowance, and 20 (11.1%) male and 171 (17.6%) female respondents indicated that they would receive student loan repayment assistance.

Of the 106 male respondents who reported a signing bonus, the mean was \$7,800, and of the 533 female respondents, the mean was \$9,383. For the 51 male respondents who reported a moving allowance, the mean was \$2,894, and for the 355 female respondents, the mean was \$3,579. For the 21 male respondents who reported compensation for handling cases on an emergency basis, the mean was \$6,300, and for the 55 females, the mean was \$5,767. For the 12 male respondents who reported a housing allowance, the mean was \$9,758, and for the 41 female respondents, the mean was \$7,705. For the 13 male respondents who reported student loan repayment assistance, the mean was \$12,742, and for the 124 female respondents, the mean was \$3,562.

Male respondents (n = 403) reported that they anticipated a mean (median) of 9.0 (9.0) benefits, and female respondents (2,037) reported that they antici-

Table 3—Types of additional compensation anticipated during the first year of full-time employment for year-2020 graduates* of the 30 US veterinary medical colleges and schools.

Type of additional compensation		Male	ale Female			
	No. (%) of respondents	Compensation (\$)	No. reporting compensation amount	No. (%) of respondents	Compensation (\$)	No. reporting compensation amount
Signing bonus	109 (60.2)	7,800 (6,103)	106	549 (56.4)	9,383 (7,593)	533
Moving allowance	60 (33.1)	2,894 (1,986)	51	410 (42.1)	3,579 (2,655)	355
Emergency case compensation	47 (26.0)	6,300 (3,300)	21	212 (21.8)	5,767 (4,117)	55
Housing allowance	21 (11.6)	9,758 (6,820)	12	79 (8.1)	7,705 (6,475)	41
Student loan repayment assistance	20 (11.1)	12,742 (32,265)	13	171 (17.6)	3,562 (4,643)	124

For each type of additional compensation, mean (SD) monetary compensation is reported. Values were based on information from 181 male respondents and 974 female respondents who indicated that they would receive ≥ 1 type of additional compensation.

See Table 1 for key.

Table 4—Benefits anticipated during the first year of full-time employment for year-2020 male (n = 403) and female (2,037) graduates* of the 30 US veterinary medical colleges and schools.

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Benefit	No. (%) of male respondents	No. (%) of female respondents			
Medical or hospitalization plan	276 (68.5)	1,478 (72.6)			
Dental plan	224 (55.6)	1,172 (57.5)			
Disability insurance	151 (37.5)	760 (37.3)			
Life insurance	117 (29.0)	593 (29.1)			
Liability insurance	243 (60.3)	1,350 (66.3)			
Paid sick leave	264 (65.5)	1,288 (63.2)			
Paid vacation leave	325 (80.6)	1,693 (83.1)			
Paid legal holidays	149 (37.0)	756 (37.1)			
Tax-deferred retirement plan (eg, 401[k] or IRS-qualified profit-sha	180 (44.7)	978 (48.0)			
plan)	ıı ıııg				
Informal profit-sharing plan, not tax deferred	I (2.7)	48 (2.4)			
Employer contribution or match to tax-deferred retirement plan	158 (39.2)	869 (42.7)			
Continuing education leave	231 (57.3)	1,177 (57.8)			
Paid continuing education expenses	295 (73.2)	1,587 (77.9)			
Paid license fees	307 (76.2)	1,491 (73.2)			
Paid association dues	246 (61.0)	1,207 (59.3)			
Use of personal vehicle	58 (14.4)	211 (10.4)			
Discounted cost for pet care	247 (61.3)	1,334 (65.5)			
Maternity or paternity leave	59 (14.6)	662 (32.5)			
Other	15 (3.7)	106 (5.2)			
None of the above	10 (2.5)	29 (1.4)			

See Table I for key.

pated 9.3 (10) benefits. Among male respondents, the most frequently received benefits were paid vacation leave (n = 325 [80.6%]), license fees (307 [76.2%]), and continuing education expenses (295 [73.2%]); offered medical or hospitalization plan (276 [68.5%]); paid sick leave (264 [65.5%]); discounted cost for pet care (247 [61.3%]); paid association dues (246 [61.0%]); and paid liability insurance (243 [60.3%]; **Table 4**). Among female respondents, the most frequently received benefits were paid vacation leave (1,693 [83.1%]), continuing education expenses (1,587 [77.9%]), and license fees (1,491 [73.2%]); offered medical or hospitalization plan (1,478 [72.6%]); paid liability insurance (1,350 [66.3%]); discounted pet care (1,334 [65.5%]); and paid sick leave (1,288 [63.2%]).

Table 5—Distribution of educational debt accumulated during veterinary school by gender (male, n = 492; female, 2,367) for year-2020 graduates* of the 30 US veterinary medical colleges and schools.

Educational debt (\$)	No. (%) of male respondents	No. (%) of female respondents	
0	66 (13.4)	414 (17.5)	
I-49,999	27 (5.5)	107 (4.5)	
50,000-99,999	47 (9.6)	217 (9.2)	
100,000-149,999	82 (16.7)	342 (14.4)	
150,000-199,999	110 (22.4)	466 (19.7)	
200,000-249,999	52 (10.6)	303 (12.8)	
250,000-299,999	41 (8.3)	229 (9.7)	
300,000-349,999	41 (8.3)	189 (8.0)	
350,000-399,999	17 (3.5)	70 (3.0)	
400,000-449,000	7 (1.4)	25 (l.l)	
450,000-499,999	2 (0.4)	4 (0.2)	
≥ 500,000	0 (0.0)	I (0.0)	

The amount of educational debt accumulated during veterinary school was calculated by subtracting the entering debt amount from the anticipated debt at the time of graduation.

See Table I for key.

Educational Debt

Respondents were asked to report the amount of educational debt they had on entry to veterinary school and their total anticipated educational debt at the time of graduation. Of the 493 male respondents, 492 (99.8%) reported their amount of educational debt; of the 2,381 female respondents, 2,367 (99.4%) reported this information (Table 5). The amount of debt accumulated during veterinary school was calculated by subtracting the entering debt amount from the anticipated debt at the time of graduation.

Mean (median) debt for male respondents was \$160,243 (\$159,242) and for female respondents was \$156,503 (\$161,000). Sixty-six of 492 (13.4%) male and 414 of 2,367 (17.5%) female respondents indicated that they anticipated graduating with no debt. Of the respondents graduating with debt, 27 (5.5%) male and 107 (4.5%) female respondents indicated that they anticipated a veterinary educational debt of < \$50,000, 160 (32.5%) male and 821 (34.7%) female respondents indicated that they anticipated a veterinary educational debt of \ge \$200,000, and 67 (13.6%) male and 289 (12.2%) female respondents anticipated a veterinary educational debt of \ge \$300,000.

Appendix

Response rates for fourth-year students at the 30 colleges and schools of veterinary medicine in the United States who participated in a 2020 survey of employment.

Veterinary college or school	No. of fourth-year students	No. of completed surveys	Response rate (%)
Auburn University	115	115	100
Colorado State University	144	104	72.2
Cornell Veterinary College	100	100	100
Cummings SVM at Tufts University	92	62	67.4
Iowa State University	138	118	85.5
Kansas State University	115	91	79.1
Lincoln Memorial University	108	108	100
Louisiana State University	88	88	100
Michigan State University	114	109	95.6
Midwestern University	109	68	62.4
Mississippi State University	87	87	100
North Carolina State University	99	98	99.0
The Ohio State University	157	133	84.7
Oklahoma State University	88	62	70.5
Oregon State University	56	56	100
Purdue University	80	80	100
Texas A&M University	132	123	93.2
Tuskegee University	56	53	94.6
University of California-Davis	145	145	100
University of Florida	113	107	94.7
University of Georgia	111	109	98.2
University of Illinois	155	131	84.5
University of Minnesota	97	90	92.8
University of Missouri	114	98	86.0
University of Pennsylvania	117	90	76.9
University of Tennessee	79	73	92.4
University of Wisconsin-Madison	84	77	91.7
Virginia-Maryland College of Veterinary Medicine	123	123	100
Washington State University	127	100	78.7
Western University of Health Sciences	100	76	76.0
Total	3,243	2,874	88.6

SVM = School of Veterinary Medicine.