# UAF Veterinary School Needs Assessment

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# **Executive Summary**

To become licensed as a Doctor of Veterinary Medicine, an Alaska student must uproot him- or herself from the state for no less than four years, compete with the in-state preference programs at most universities, and pay hefty out-of-state tuition rates. In an effort to alleviate some of these burdens, as well as to provide other tangential benefits to the state and its residents, the University of Alaska Fairbanks (UAF) is considered offering the first two years of education in the state, partnering with Colorado State University (CSU) for the final two years. This study, which surveyed Alaskan clinical and non-clinical veterinarians, veterinary employers, and allied professionals, was commissioned to assess the perceived needs and desirability of such a venture.

Support for the proposed program is evident among three-fourths of the 86 survey respondents in their concluding response, an open-ended request for input on the proposal. Supporting comments cited an increase in Alaskan veterinary students, reduction in student debt upon graduation, the possible progression into a vet tech program, less competition for acceptance, and improved rural care due to Alaska student retention.

Concerns were raised about the financial feasibility of the venture and whether it would serve the purpose of retaining Alaskan students. It was also noted that the lack of access to seasoned professors and upper level students could put Alaskan students at a disadvantage upon entering their final two years at CSU.

Seventy-five percent of clinical veterinarians with ownership/management responsibilities at their place of employment reported having *difficulties in recruiting new veterinarians*. *Retention issues were less prominent*, but still difficult among 44%. Almost all veterinary employers who reported difficulties in hiring new associates felt that the UAF program would provide qualified professionals for their organization, and touted the job prospects for newly graduated veterinarians in the state.

Nine of twelve non-clinical veterinarians and 19 of 50 clinical veterinarians suggested that additional training is needed to work in Alaska, with the following specifics identified: rural practice and field based procedures, wildlife capture and handling techniques, sled dog medicine, local and regional parasites, and epidemiology. It was suggested that these needs could be addressed with rural practice rotations, externships and dedicated coursework. In a separate survey of veterinary employers staffing more than one DVM, almost 75% reported that standard training is sufficient for their staff. One-fourth suggested the need for further on-the-job training, experience, or a Ph.D. in pathology or a related field.

To gain a broader view of the veterinary industry and veterinary education and how they might be affected by the proposed 2+2 program, six of the clinical and all 12 of the non-clinical respondents were identified as key informants and further queried with a series of open-ended questions. It was agreed that *few veterinary school graduates consider Alaska as a career destination*, indicating a need to recruit more Alaskans into veterinary careers in order to increase the number of candidates for employment in the state.

and a reluctance to leave Alaska for such a long period.

Almost all key informants reported having spoken to students about pursuing veterinary medicine as a career. *Of the concerns raised among students, most could be addressed by the proposed UAF degree program:* the low rate of acceptance at veterinary schools, the financial burden of out-of-state tuition,

A majority of key informants felt that the program would have a positive effect on veterinary care and veterinary medicine as a profession in Alaska. Concerns were raised with how many veterinarians our market could bear, the quality of training available in-state, and the potential for competition with local clinical veterinarians if a training hospital were part of the program.

Allied professionals surveyed, although only five in number, reported that specialized training for Alaska veterinarians is required and agreed that *having a veterinary school at UAF would help increase the availability of needed veterinary services in Alaska*.

Published data on the veterinary profession project it to be the **18**<sup>th</sup> **fastest growing occupation** in the US between 2008 and 2018, increasing 33% over that period of time. This raises the question as to whether existing veterinary schools can train enough professionals to fill the need.

The US is already witnessing a severe shortage of veterinarians in the areas of food supply, rural care, public health, and diagnostic laboratory and biomedical research. Only one small veterinary school has opened in the past 30 years. Therefore, even as demand grows, the US can still only graduate about 2,500 veterinarians each year. The rate of attrition through retirement almost exceeds that number. The US Animal Health Association identifies the leading cause of our overall veterinary shortages to be lack of capacity at our colleges.

# **Introduction and Background**

This needs assessment was commissioned to determine the viability of offering an accredited "2+2 program" between UAF and the College of Veterinary Medicine and Biomedical Sciences, Colorado State University leading to a Doctorate in Veterinary Medicine (DVM) being awarded to participating students. All pre-veterinary requirements, as well as the first 2 years of the professional program, would be completed at UAF, and the completion of the schooling, the final 2 years, would be at CSU in the veterinary teaching hospital. UAF would continue to offer undergraduate and graduate training in environmental health and biomedical sciences (e.g. pre-vet, pre-med, pre-dental, B.S., M.S., and Ph.D.).

#### **Context**

In the new paradigm of One Health, "A collaboration of disciplines working collectively to attain optimal human, animal, plant and environmental health," veterinarians play an increasingly vital role. According to the Committee on Diagnostic Laboratory and Veterinary Workforce Development, "This Nation's veterinary workforce is the front line of defense for food safety/security, animal and public health and homeland security." Defense against animal diseases which can negatively impact the health of animals, humans, and the economy is a must. Alaska will need to educate and retain a workforce capable of sustaining and propelling it into the future. In terms of veterinary medicine education, this means not only encouraging veterinary medicine as a career, but also promoting research, graduate veterinary education, professional services for the veterinary community, and continuing education in animal health and disease.

## **Current Offerings**

At present, Alaskan students interested in pursuing a degree in veterinary medicine must first compete for entry into one of the 28 US institutions offering a degree in veterinary medicine with those students who were more likely to have completed their undergraduate studies at the university to which they applied. Most of those universities have in place an evaluation process that weighs heavily on the side of in-state applicants. More than 75% of students accepted into DVM programs in the US were either a resident of the state in which the university was located, or from states with contracted agreements with that university (Table 1). This suggests that Alaskan students are at a disadvantage from the outset. The next step for veterinary degree-seeking students is to leave their community, severing ties and connections, for a period of no less than 4 years.

There are both advantages and disadvantages to the State of Alaska when this migration occurs. Financial advantages exist in that taxpayer dollars can be spent elsewhere. Another prominent advantage occurs when our residents gain knowledge and skills elsewhere and return to the state, improving our local economy. But therein lies a key question — will they return? If students leave during their highly formative college-age years, they may find compelling opportunities elsewhere and not look to Alaska for their careers. In addition, without an institutional structure providing professional education opportunities, it is difficult to tell whether those students seeking education outside Alaska are indeed the brightest from the state, or are simply those who have access to funds to support an out-

of-state education. National statistics show that about 80% of college-bound students attend school in their home state, yet in a recent study, only 62% of Alaskan college-bound students remained in state.

## **Methods**

A Needs Assessment study was initiated and commissioned by the UAF Veterinary Medicine Planning Task Force in mid-2010 to determine the viability of offering a degree in veterinary medicine at UAF. A consultant was hired and proposed a two-fold approach to the task: first, to assess the demand for licensed veterinarians in the state of Alaska, concentrating on both traditional clinical veterinary field and those in specialized fields; and second, to identify how such a program might benefit Alaska as a state.

## **On-Line Surveys**

To address the demand issue quantitatively and to gain insight into how a DVM program might benefit the state, multiple on-line surveys (Appendix C) were created, tailored to specific respondents throughout Alaska as follows:

Veterinarians in Clinical Practice

Veterinarians in Clinical Practice – Key Informants

Veterinarians not in Clinical Practice

Veterinarians not in Clinical Practice – Key Informants

**Employers of Veterinarians** 

Allied Health Professionals

**Guidance Counselors** 

Students

The surveys were recreated on Survey Monkey, a web-based survey service. Each was then printed to allow alternate dissemination via fax or mail.

#### **Respondent Population**

The respondent population was determined to be veterinarians licensed in the state of Alaska in 2010 (Appendix A). As per Corporations, Business and Professional Licensing (CBPL), in the Commerce Division of the State of Alaska, they numbered 322. Complete mailing addresses, but sporadic email addresses, telephone contact information, and employer information, were obtained through the CBPL. As the survey method involved on-line access to respondents, it was mandatory that an accurate list of email addresses be obtained. A letter of introduction from Dr. John Blake was forwarded to each potential respondent (Appendix B) through the US Postal Service to introduce the proposed project in abbreviated form and to elicit a response which would include an email address. Of the 322 sent a "Dear Colleague"

letter, seven responded with an interest in participating in the on-line survey. The letter was a qualitative success in that nearly every veterinarian contacted throughout the duration of the study communicated having received and read the letter. The few that reported not having received a letter expressed an interest in obtaining one and were forwarded an electronic copy.

Additionally, an extensive on-line search of veterinary practices in the state was conducted, which oftentimes produced an email contact if not for each individual DVM in the practice, at least a generic practice email. The next step involved a call to each practice, requesting email information for, or a return call from each veterinarian. The final step involved attempting to contact all veterinarians for whom contact information, but not a practice affiliation, was obtained. Each potential respondent was invited to complete the survey via telephone, fax, traditional mail, or email link to the on-line survey.

Neither phone nor email contact information was ever obtained for 152 of those contacted via mail, reducing our base of available participants. Additionally, email addresses for individual DVMs were often inaccessible, dictating that a generic email appeal be sent to their practice with a request that it be passed through internal email to each DVM. Although there were over 300 licensed veterinarians in the state, the number of veterinarians employed in the state, as per the AK Department of Labor and Workforce Development, was only 136 in 2009. The discrepancy in licensed vs. practicing veterinarians was not an issue in this study and can only be hinted to be the result of retirement, relocation, career choices and family demands.

The list of licensed DVMs in Alaska was further divided into two categories, those in clinical practice and those not in clinical practice. Clinical practice was defined as a traditional companion animal facility, including equine. Non-Clinical was varied and included government-hired veterinarians, consultants, and researchers. Similar questions were asked of both survey-bases, but Non-Clinical respondents were queried as to their specialty and how a degree program at UAF might improve understanding of Alaska-specific issues pertaining to their specialty.

## **Key Informants**

A key informant list was identified through conversation with Dr. John Blake, Dr. Todd O'Hara, Dr. Henry Huntington, and Dr. Kathy Burek. Those identified as key informants were queried with the same survey as others in their field, but augmented with additional questions due to their presumed extensive knowledge of the veterinary community and how it might be affected by the introduction of a degree program in the state.

#### **Veterinary Employers**

Veterinary Employers were varied in make-up and included owners of clinical practices as well as government agencies and private organizations.

An on-line search of Alaska veterinary clinics was conducted and cross-checked with the available list of veterinarians obtained from the Division of Occupational Licensing, as it contained some information regarding employment for licensed veterinarians. Clinics were then contacted via telephone to determine the number of employed veterinarians on staff. If it was identified as a single-DVM

organization, the Veterinary Employer survey was not forwarded. More than one licensed veterinarian on-staff defined the respondent as a veterinary employer for the sake of this study.

Government agencies that employed veterinarians were identified through conversation with numerous professionals in the veterinary community.

#### **Allied Professionals**

Allied professionals were defined as those not directly involved in veterinary activity, but who would have knowledge of and influence among populations, communities, or organizations that benefit from veterinary activity. A list of allied professionals was initially suggested by Dr. O'Hara, but altered throughout the progression of the project based input from respondents. The small group of Allied Professionals targeted in the study included representatives from the Alaska Raptor Center, the Maniilaq Corporation, the City of Bethel, the North Slope Borough, and the U.S. Geological Survey (USGS).

#### **Guidance Counselors and Students**

Due to the time constraints of the project, and the fact that it was undertaken during summer vacation, it was determined that guidance counselor and student input would be accepted if presented, but no extensive efforts would be made to access this respondent base.

#### **Published Research**

To further address the possible benefits to the State of Alaska, a search of available published research was undertaken, both global and regional.

# **Survey Results**

#### **Clinical Veterinarians (Initial Questions)**

Fifty clinical veterinarians responded to the survey. More than 70% of respondents have been practicing veterinary medicine for over 10 years. More than 50% have been practicing longer than 10 years in the state of Alaska (Figure 1).

Twenty-seven respondents answered questions pertaining to ownership or management responsibilities at their current practice. Hiring difficulties were more prevalent then retention difficulties (Figure 2) with almost 75% responding that they 'often' or 'sometimes' have trouble recruiting veterinarians, whereas 44% reported similar troubles with retention.

Fourteen of the veterinarians either grew up in or did their undergraduate work in the state of Alaska. They were fairly evenly divided when asked if leaving the state to attend veterinary school was an obstacle in pursuing their veterinary career. Those that did identify it as an obstacle overcame that obstacle through military service, delayed education to obtain residency elsewhere, or through the help of the Western Interstate Commission for Higher Education (WICHE, an organization with the goal of improving access to higher education and assuring the success of students in higher education. Although Alaska is a member of WICHE, veterinary higher education is no longer covered under the program

through the state). Two respondents stated that leaving the state for a graduate degree led to an undesirable lengthy stay away from the state.

All respondents were asked if there are aspects of veterinary medicine in Alaska that require or would benefit from additional training, beyond that provided in veterinary schools in the lower 48. Almost 40% responded affirmatively, suggesting a wide range of additional training aspects that should be addressed for Alaskan veterinarians:

Endurance canine athlete

Rural area practice

Wildlife response

Equine cold weather/dehydration/starvation

Local and regional parasites and infectious diseases

Unique species

Wild animal encounters (porcupine)

Plant problems (Cow Parsnip and Devils Club)

When queried further, as to what kind of training might help address the issues listed as lacking in Alaska, respondents answered:

#### Externships

Externships with North Slope Borough vet. General practice internships to allow new grads the confidence to practice in areas where there may not be much mentorship.

An externship/internship with an Alaskan veterinarian would show an array of Alaska type problems and how to deal with them.

I think offering but not necessarily requiring a remote location externship (clinic or spay/ neuter program) would be a good idea. Also offering a limited number of volunteer positions working at the start or the checkpoints of the Iditarod race might be instructive.

#### **Rural Practice**

Would be nice to see some sort of rural community rotation where students could see how animals interact with humans, what the risks are and what the needs are in these communities. Also would be a good experience to see how to practice quality medicine with limited resources.

For rural AK practice one really needs to be trained and skilled in handling many species, small, large and wild and surgical/diagnostic skills need to be developed for working in areas where referral is not a practical or affordable choice.

In AK in particular, "bush medicine" and the logistical/legal/ ethical ramifications of practicing in remote areas might also be discussed in vet school, or introduced in an externship/ medical rotation fashion.

#### Coursework

Training in wildlife medicine is difficult to find in the lower 48. UAF would provide an excellent opportunity in this. Training/work with sled dogs would also be a nice thing to offer.

It would be desirable to have knowledge of caring for an injured or sick horse in the severe cold (dealing with the horse and with equipment, etc.).

Coursework in fish/aquaculture and marine animals.

Respondents were asked how strongly they agreed or disagreed with the following statement: "Providing at least two years of veterinary school education in Alaska will improve veterinary care in the state." Almost half responded with some level of agreement, while only one-fourth were in disagreement. The remainder were neutral on the topic (Figure 3). Reasons for agreeing with the statement generally centered around increased opportunity for locals, increased potential for return of locals, ease of retention once veterinarians have been exposed to our climate/conditions, and an improvement in rural veterinary care. Those in disagreement stated little correlation between offering an in-state degree program and improved care in the state. Explanations as to the level of agreement were insightful and informative by all respondents and are included in Appendix D.

## **Non-Clinical Veterinarians (Initial Questions)**

Because there are few non-clinical veterinarians employed in Alaska, a quantitative survey was judged unnecessary. Instead, twelve key informant interviews were conducted. Their employers included federal, local, and state governments, as well as private practice specialties.

There were no non-clinical veterinarians with less than 5 years of experience, four with less than 10 years and eight with more than 10 years experience (Figure 4). This follows the national trend of an aging veterinarian workforce.

Respondents were evenly divided when asked whether they practiced veterinary medicine or were in an allied profession.

Only one respondent said there were too many veterinarians in his/her specialty, with four responding that their field is adequately staffed. Six respondents reported a shortage of veterinarians in their current line of practice.

When asked about the obstacles to offering additional positions or to recruiting and retaining qualified individuals, non-clinical veterinarians offered various responses:

Remote location, living expensive, lack of access to specialists, lack of CE opportunities in the state, lack of support for newcomers

Alaska's location / distance from lower 48 / Alaska weather

1. Lack of commitment by natural resource agencies of the value a veterinarian can bring to them. 2. Unwillingness of natural resource agencies to commit funding and position commitments to hire veterinarians.

The distance and difficulty maintaining family relationships for employees with family in the lower 48 has been a problem for us as employers. The environment is sometimes a problem. Low numbers of horses compared to other areas of the US is a problem recruiting quality veterinarians to work on horses.

Do you mean offering positions that are similar to mine (which is really unique) or just having more people in public health with vet degrees? Many vets in public health have add'l degrees and qualifications/skills so there is great variety in possible job opportunities depending on the other skills.

1. Salary - the State of Alaska pays pretty bad for a veterinary degree. 2. Not enough qualified applicants in the state.

Free range wildlife. It's hard to get at any vet school. UAF no longer has the WICHE program, so kids have to obtain residency elsewhere in order to graduate. I have been uniquely trained for my job, and would not possibly have my job without specific training. Alaska partnering with CSU will actually be a benefit to CSU because of our access to wildlife and wildlife training. Currently I can't put vet students in the field, even when they come to volunteer, because they are not residents of the state of Alaska. Something about insuring them. If UAF and CSU had a program, I could put those students in the field and give them the field experience they need.

Seasonal demand issues were a concern to about half of participants, and half of those were able to meet demands with seasonal hires.

Alaska specific training, beyond that provided in the lower 48, was suggested by 9 of the 12 respondents, citing the following needs:

Epidemiology

Alaska Infrastructure (i.e., no counties)

Climate change on ecosystems and animal diseases

Animal capture and handling techniques

Shelter medicine

Field based procedures

These needs could be met through training modules that qualify as CE, mini-sabbaticals at other facilities, and hands-on workshops for veterinarians, vet techs, and wildlife biologists.

Respondents were generally in agreement that providing at least two years of veterinary school education in the state would both increase the number of veterinarians in the state and provide them with a better understanding of Alaska-specific issues. Alaska veterinary issues were identified as unique, but surmountable through education, although many stated that students would benefit more from being in Alaska during some of the final two years of education. More difficult seemed to be the lifestyle and family issues, which could be countered by keeping those familiar with Alaska in the state rather than recruiting from the lower 48.

#### Key Informants – Clinical and Non-Clinical

Deemed to be knowledgeable and experienced in their field, six of the clinical and all twelve of the nonclinical veterinarians were asked an additional set of questions. Veering away from the clinical and career-oriented questions in the original survey, Key Informant questions, which were mostly openended, attempted to address the veterinary industry and veterinary education in a broader sense.

Recalling that only one of the key informants was raised in or did some undergraduate work in the state, it is interesting to note that four had already decided to move to the state before entering vet school and one made the decision during. Two came to Alaska through military relocation and eight decided to move after completing their degree. Characteristics that attracted veterinarians to Alaska were varied, with "an outdoor environment" being most prominent. Less frequent attractions included a specific job, family, and previous experience.

When asked to consider veterinary school classmates, it was of general consensus that very few veterinarians would consider moving to Alaska. The reasons why few would consider Alaska were similar to those reasons that some do consider Alaska – winter, family, remote.

Almost all key informants reported having had discussions with students about considering veterinary medicine as a career. The location of vet schools was rarely reported as having been discussed, but other concerns about vet school could be addressed by the proposed UAF program:

"More students are concerned with just gaining acceptance into a program" – if there was a higher weight put on Alaska-residency for acceptance into the UAF program, this issue would be negated.

"If they actually had a choice, I think that they would go where it is least expensive which is typically the state in which they have residency." – In-state tuition would greatly reduce the cost to Alaska residents.

"Many students do not want to leave Alaska for studies." - Keeping these students in Alaska for two additional years would help in alleviating the pressures involved in leaving family and the comforts of home.

When questioned as to how the UAF program might affect veterinary care and veterinary medicine as a profession in Alaska, two-thirds were in agreement that it would have a positive effect, with sentiments similar to "Positively. Motivated in-state students would be more likely to pursue veterinary medicine as a career, and the presence of a teaching facility would likely increase local practitioners' standard of care." Among the concerns raised were:

There could be a downside to general practice if there was a clinic associated with the school that competed with local practices.

...someone more economically-thinking could assess what the market would bear.

I am concerned that with the quality of science training the Alaskan-schooled students have received at their local high schools (esp. the rural schools), they may not excel in a pre-vet program and gain admission to a veterinary school. Some of the most basic tenets of science had not been taught to these students.

There were also concerns about what students would lose from not having access to seasoned professors and upper level students during their first two years of schooling.

Regarding job prospects in Alaska for newly graduated veterinarians, both now and in the future, two-thirds of respondents appeared to be optimistic, citing ample opportunity in the veterinary field. "As the population of the state increases there is an increase in the number of domestic pets", thus a need for a greater number of clinical practitioners.

On the other hand, although more demand is noted in rural areas, financial rewards were not as prominent. Additionally, it was stated that Alaska's rate of pay is not consistent with the lower 48. Finally, non-clinical positions are extremely limited and starting pay for newly graduated veterinarians in those positions is too low to compete with private practice.

#### **Veterinary Employers**

Nineteen respondents with veterinary hiring responsibilities in facilities with more than one DVM on staff were questioned to gain an understanding of the recruiting and retention issues prevalent in Alaska, as well as to assess their impression of the proposed implementation of the 2+2 program. Respondents were required to have input or insight into the hiring process at their organization; they did not necessarily have ownership in a practice, nor were they themselves required to hold a DVM. Sixteen respondents reported being in a clinical practice, two in public health, and one as a private contractor.

As far as recruiting difficulties, only one respondent reported having never had problems with recruitment. Eleven were in agreement that there sometimes were difficulties with recruitment, while six reported always having problems (Figure 5). Standard training was sufficient for the positions for

which they hired according to 14 respondents – leaving five who asked for either on-the-job training, more experience, or a Ph.D. in Pathology or a related field.

Fifteen veterinary employers felt that a veterinary medicine program at UAF would help provide qualified professionals for their organization. Increasing Alaskan interest and educating students in the unique aspects of Alaska were most prominently mentioned as reasons how and why a program at UAF would provide qualified professionals for their organization. It was mentioned that newly graduated students will still be lacking in much-needed experience, and that because Alaska has such a small population, we may be overwhelmed with educated veterinarians in a short period of time.

According to almost all veterinary employers polled, job prospects for newly graduated veterinarians in Alaska, both now and in the future, are good. Current veterinary shortages were noted in Southcentral, at the North Slope Borough, and among livestock veterinarians and veterinary technicians. Two respondents alluded to Alaska either lagging behind or experiencing opposite trends than the lower 48 – "I've been in practice in Alaska since 1969 and have noted this economic factor: when the economy is better in AK than the L48, there are plenty of applicants; when the L48 is doing better than AK there is a dearth of applicants. What the future holds is anyone's guess. I have mentored and recommended over 15 'Alaskans', none of them natives, who have attained DVM degrees; about 50% of them did not return to practice in Alaska."

## **Allied Professionals**

Of the five participating allied professionals, one worked for the North Slope Borough, one in Bethel, and three were wildlife biologists for USGS. Specific needs that veterinarians provide in their organization, community, or constituency were both clinical and non-clinical in nature. Spay/neuter as well as vaccinations to reduce rabies occurrences was listed under clinical needs. Non-clinical needs included wildlife tracking, surgical procedures and postmortem evaluation, assessment of disease state, and histopathology. Veterinary services were available through USGS for the biologists, but demand was greater than availability and schedules were often dictated by availability of a veterinarian. Veterinary service for the two rural regions was limited. It was stated that the only services available in the entire Yukon-Kuskokwim Delta area are in Bethel and Aniak – leaving 44 villages without veterinary care.

Every respondent agreed that there are conditions in Alaska requiring specific training or experience with regard to veterinary services. Responses were again divided between clinical and non-clinical responses, although rural and field needs seemed similar – being able to work in less than optimal conditions with little or no staff support. Hands-on mentorships were suggested as the best method to educate new veterinarians.

All respondents agreed that having a veterinary school at UAF would help increase the availability of needed veterinary services in Alaska.

#### **Final Questions**

Every respondent, regardless of the survey, was asked to provide any additional comments concerning the possibility of UAF offering the first two years of a veterinary medicine degree. All comments are included in the Appendix D and many are worth taking the time to read.

Three out of four responses leant support to the proposition of a veterinary program at UAF. Most positive responses were generic in nature; specific advantages cited include an increase in Alaska students, lowered expense for students, possible progression into a vet tech program, less competition for acceptance into schools, and improved rural care due to Alaska student retention in the state.

I believe that there is a general shortage of veterinarians across the country. It is very difficult to recruit veterinarians to move to Alaska to work. Many people choose to move away after a few years here if they have not lived here before. It is very difficult to get accepted into veterinary school as an out of state resident. Providing a veterinary program in Alaska would increase the number of Alaskans who become veterinarians. These students would be much more likely to practice veterinary medicine in the state.

A program of this type would encourage youth who are already familiar with the special needs and environment of the villages to pursue a career in veterinary medicine.

It has been very frustrating over my 5 1/2 years of practice here to watch student after student leave the state to gain residency elsewhere b/c they had been denied admission. Most of these students are well qualified and simply have the disadvantage of applying as out of state applicants. If they do get in as an out of state resident, odds are they will be graduating with greater than \$100,000 in student loans. It also seems that we go through phases where there is a deficit in the number of practicing veterinarians; this may be a normal fluctuation but I do not see the same patterns in other locations (as described by friends in practice around the lower 48). I also see a need to increase the number of veterinarians in public health practice over the next few years.

Responses that did not lend support to the proposal ranged from a simple 'no need' to a lengthy discussion about tax implications. Most prominent were concerns about actually keeping educated students in the state without mandates to return, and concerns over the financial feasibility of such a venture. A few respondents were concerned about what students would lack in terms of access to seasoned professors, upper level students, and clinics during their first two years at UAF.

Is the goal of establishing such a program to get individuals to return to Alaska to practice veterinary medicine upon completion of their formal studies? If the goal is to get folks to return, setting up such a school is not the answer in my opinion because there is no assurance that such individuals will remain in Alaska even after they earn their degrees. Attract folks to return to Alaska by providing incentives to potential employers and by encouraging potential employers to pay top dollar for new hires. There are ways to provide education without costing tax payers more money.

If the idea is to retain graduates in Alaska, I would place the school in Anchorage rather than Fairbanks. Anchorage has a milder climate, more vets that might be available to teach and more night life.

I certainly saw a need for the program- students were interested at UAF, but at the time did not have the capacity even to really effectively counsel pre-vet students. I am skeptical about these students returning to state to practice. If this is a motivational factor for planning, I would be cautious and perhaps consider polling students. Could it be a requirement of the program?

I think the idea of veterinary education tailored to Alaska is a good one, but as a non-clinical veterinarian, I am truly concerned about the limited employment opportunities. It seems that a directed Vet residency program here in Alaska would be a way to seek out students that have an interest in Alaskan issues (wildlife, public health, etc). They would be further along in their education to apply their knowledge to specific issues. I'm not sure it really matters where students do their first two years of vet school. And there is always the risk that they will not return to Alaska. Instead, seeking out undergraduates, providing meaningful summer employment here that continues through vet school, with a commitment for a residency...this would serve to bring those truly interested to the state. This would be similar to the former WICHE program, I believe, but with more structure. It would be interesting to see how many students that went through the original WICHE program eventually left the state, considering Alaska had no return requirements, to my knowledge.

Respondents were asked to provide contact information if they had additional questions, or if they would like to be contacted if the degree program is instituted at UAF. A list of 32 individuals that are interested in hearing more about the program is included in Appendix E.

#### Responses Outside the Surveys

In response to the "Dear Colleague" letter sent by Mr. Blake to introduce the proposed program at UAF, two letters and numerous telephone calls were received in support of the venture. The Interior Veterinary Medicine Association, representing over 30 veterinarians in the state, sent a letter in strong support, citing a shortage of rural veterinarians and the need for a clinical pathology facility. The second letter, from Scarlett and Wayne Hall near Eagle, on the Yukon River, described the witnessed shortage of veterinary care in rural areas. The most detailed phone review was from Bob Gerlach, the AK State Veterinarian, who supported the venture "...considering the pivotal role this type of department should play in the future disease surveillance issues (domestic and wild animal diseases, food borne pathogens, zoonotic disease, invasive species) facing the state and the complexity that climate change and the need for development of local food sources will influence on this ecosystem health approach." Both letters and a review of each phone call are included in Appendices F and G.

## **Review of Published Research**

#### **Veterinary Research**

2011 is being recognized as "World Veterinary Year," 250 years earlier the first veterinary school was opened in France and the veterinary profession was born. Senator John Ensign of Nevada, the only veterinarian currently in the US Senate, introduced resolutions to both the House and Senate in July of this year, suggesting that we recognize and honor the year 2011 as such. From their initial designation as

"animal doctors" and "animal welfare advocates," veterinarians have come to be recognized for contributions to biomedical research, zoonotic disease identification and prevention, comparative medicine, food safety, and the reduction of global hunger; embracing and advancing the "One Health" initiative.

"Veterinarian" is projected to be the 18<sup>th</sup> fastest-growing occupation in the United States between 2008 and 2018, with a 33% increase in employment opportunities. "Veterinary Technologist and Technician" is higher on the list at number 13, expected to grow almost 36% over the same period of time (Table 2) Historically a male-dominated occupation, the trend toward female-domination continued in the beginning of this century. Between 2003 and 2008 the number of actively employed female veterinarians in the US increased by more than 30%, whereas the number of male employed veterinarians remained stagnant over the same period. US figures show an approximate even split between male and female veterinarians at present, while Alaska is 60% female and 40% male. Seventy-six percent of veterinary school applications in the US in 2010 were submitted by females.

With industry growth and demand on the increase, the question remains as to whether there will be enough veterinarians to meet that demand. We are almost at crisis mode nationally already, with veterinary shortages at epidemic levels, particularly in the areas of food supply, rural, public health, and diagnostic laboratory and biomedical research. Additionally, in contrast to other major health professions, where the educational opportunities have grown in proportion to public need for services, the number of US veterinary medicine colleges has not changed in the past 25-30 years, save one privately funded California college established in the late 1990s. Mimicking this sentiment almost verbatim was Dr. Kurt Schrader, a veterinarian and member of the US House of Representatives, when he stated "Veterinarians are becoming an 'endangered species' in the area of food supply veterinary medicine even while global demand for a safe and humanely raised food supply is on the rise." He also noted that zoonotic pathogens, which account for 75% of all new diseases, could pose a much greater threat to us than al-Qaeda or weapons of mass destruction.

With approximately 3100 federally employed veterinarians, the Government Accountability Office has stated that although these professionals play a vital role in US safety, some alarming statistics still exist. A full 27% of the veterinarians employed at Animal and Plant Health Inspection Service (APHIS), the Food Safety and Inspection Service (FSIS), the Agricultural Research Service (ARS), the Food and Drug Administration (FDA), and the Army are eligible for retirement within the next three years. There is an on-going 35% vacancy rate of veterinarians in the FSIS department, and the agency's ARS has a 12% shortage of mission-critical veterinarians. Within the USDA, component agencies are ignoring the department-wide strategy to balance the needs of agencies and competing against one another for veterinarians because they cannot fill the positions with outside applicants.

The demand for food supply veterinarians is expected to increase 13% between 2004 and 2016, with the supply of such practitioners falling over the same period of time. Contributing factors to the shortage have been identified as excessive student debt, low starting salaries, the decline of family farms, and rural lifestyle issues. Although food supply veterinarian and rural veterinarian are not synonymous terms, they often go hand-in-hand, and the shortage of rural practitioners in the US is an on-going

struggle. Some of the characteristics that initially drew new graduates to rural areas are the same characteristics that eventually pushed them away as they matured and progressed in their career – rural lifestyle, family issues, emergency care, salary. The shortage of rural practitioners witnessed throughout the nation is also prominent in Alaska. Most of our boroughs and regions are too under-populated to support a full-time veterinarian – those that can support one based on numbers face the same issues as rural areas in the lower 48. The Veterinary Medicine Loan Repayment Program asked that state officials identify the most deserving shortage situations that would warrant designation by the USDA, with the goal being to offer debt relief to veterinarians working in the areas. As one of the stipulations to qualify, a region had to host a population of 50,000 inhabitants, leaving most of Alaska regions out, but Robert F. Gerlach, VMD, State Veterinarian, submitted the following shortages for Alaska:

- Fairbanks to Delta Junction Private Practice, Rural Area Beef Cattle, Dairy Cattle,
   Swine, Poultry, Small Ruminant and Other (Yak, Musk-Ox, Elk, Reindeer)
- Kenai Peninsula Private Practice, Rural Area Beef Cattle, Poultry, Swine, Small Ruminant, Other (Yak, Elk)
- Kodiak Island and the Aleutian Island Private Practice, Rural Area Beef Cattle, Poultry, Swine, Small Ruminant, Other (Bison, Elk, Yak, Reindeer)
- Matanuska-Susitna Borough Private Practice, Rural Area Beef Cattle, Dairy Cattle,
   Poultry, Swine, Small Ruminant, Other (Yak, Musk-Ox, Elk, Reindeer, Bison)
- Fairbanks Public Practice Food Safety, Public Health, Other (Veterinary science outreach education to veterinarians and livestock producers across the state)

The shortages within individual veterinary specialties all have identifiable, if not nationally reparable, causes (i.e., salary, debt, benefits, lifestyle issues, emergency care, etc.). However, the US Animal Health Association identifies the leading cause of our overall veterinary shortage to be lack of capacity at our colleges. Applicants outnumber freshman seats at US colleges by over three to one, indicating that both increased capacity and efficiency at veterinary colleges may be the key to jumpstarting growth in the veterinary workforce.

That being said, almost \$50 million in public support has been pulled from the nation's 28 veterinary schools in the past two years. Almost 15% of staff and faculty positions have been lost in the same period of time due to cutbacks. With the average debt per graduate nearing \$130,000 upon completion of their degree, and excessive debt drawing new graduates away from much needed rural and public practice, veterinary schools are still being forced to implement tuition hikes to make up for the loss of public support. Veterinary student debt is increasing about four times as fast as veterinary salaries — an unsustainable phenomenon.

Current curriculums and levels of education have had few criticisms. One complaint, common to many healthcare fields, is that colleges continue to produce good doctors, but not good practitioners. It was suggested that animal welfare and knowledge of related current events become an integral part of the education process. Dr. Bennie Osburn, Chair of the North American Veterinary Medical Education Consortium (NAVMEC) observes that society's demands cannot be met by any one institution, indicating that colleges will have to become less independent and find ways to share resources and expertise.

NAVMEC has a goal to develop and provide a flexible guide for veterinary education institutions. "This would be supported by changes to the accreditation, testing, and licensure processes so as to allow veterinary schools and colleges to more easily adopt creative curricula and teaching delivery systems. The anticipated results: a veterinary profession able to meet changing societal needs."

As veterinary medicine gains long-deserved recognition for its continued role and contributions to public health, society is taking initial, if baby, steps to avert a full crisis in the field of veterinary medicine. Legislators, educators and the general public are rallying around the need for improved veterinary care, but there is a long way to go.

#### Alaska Research

Alaska may have traditionally been immune to many of the trends, both economic and other, that affect the Lower 48, but our 21-year streak of job growth finally came to an end in 2009. We are expected to lose jobs in 2010, albeit at a lower rate than in 2009. Economists at the Department of Labor and Workforce Development attribute both job loss figures to world economic factors, indicating that perhaps we are more connected than we believed – although our driving economic force remains in the oil and gas industry. Assuming no major capsizing of our key industry, Alaska could begin another long stretch of employment growth as early as 2011.

The population in the state has been growing steadily at a higher rate than that of the rest of the United States, 10.3% for Alaska vs. 8.8% for the US between 2000 and 2009. The growth is attributed primarily to natural increase, but to a lesser degree, in-migration. As with national trends, our rural areas are lagging. Only 11 of our 29 boroughs actually contributed to the population growth, the remaining 18 saw losses over the same period of time.

A recent study in *Alaska Economic Trends*\_characterizes and discusses the eight Majority Native Areas in the state and their migration patterns, stating that "The under-20 population of the Majority Native Areas is rapidly growing, and without a similarly rapid growth in jobs and training opportunities following high school, there's a strong pressure for young people – individual and families – to move out of the state's rural communities" (Anchorage Migration by J. Gregory Williams, State Demographer). The growth is large, but the net loss of population through migration is larger, amounting to as much as 7% each decade. A disproportionate amount of departure among younger adults and women is also noted. Again, through all the uniqueness of Alaska, this trend seems to be the norm nationwide as rural areas compete to remain vital.

# Summary

Of the 322 licensed veterinarians in the state, 136 are currently employed in the field of veterinary medicine. This study includes responses from 62 of those veterinarians (50 clinical and 12 non-clinical), along with 19 veterinary employers and 5 allied professionals.

Seventy percent of participating clinical veterinarians have been practicing for more than 10 years; more than half indicated ownership and/or management responsibilities in their current place of

employment. Recruitment issues were reported to be more prominent than retention issues when referring to hiring practices. Aspects of veterinary medicine in Alaska that require or would benefit from additional training were identified and fell into one of four categories: plant, animal, environmental, or rural practice issues. Suggested training to address the issues included externships and coursework. Almost half of clinical veterinarians agree that the proposed UAF 2+2 program will improve veterinary care in the state.

Evenly divided between those that practice veterinary medicine and those that practice in an allied profession, eight of twelve non-clinical respondents had more than 10 years of experience. Half report a shortage of veterinarians in their specialty. Obstacles to offering additional positions or to recruiting and retaining qualified individuals elicited responses in the following categories: salary, location, government funding, and education. Alaska-specific training is suggested by nine of the respondents, and there is general agreement that providing at least two years of veterinary school education in the state would both increase the number of veterinarians in the state and provide them with a better understanding of Alaska-specific issues.

Key informants, 6 clinical and 12 non-clinical, came to the state through a variety of channels. Only one is originally from Alaska; five decided on Alaska either before or during vet school. The most prominent draw is identified as the environment. When asked to consider veterinary classmates and their propensity to move to Alaska, it is generally agreed that very few would. Almost all key informants had discussed veterinary medicine as a career choice with students, indicating that school location was rarely an important topic, finance was often more relevant. Two thirds of respondents felt that the UAF program would have a positive effect on veterinary care and veterinary medicine as a profession in Alaska. An optimistic view is held of job prospects in Alaska, both now and in the future, for newly graduate veterinarians.

Of the nineteen veterinary employer respondents, sixteen were in clinical practice. Six reported always having and eleven reported sometimes having recruitment difficulties. No special training was suggested by 14 of those hiring veterinarians in the state. When asked if the proposed program at UAF would provide qualified professionals for their organization, fifteen agreed that it would. Employers reported the job prospects for newly graduated veterinarians in Alaska, both now and in the future, are good.

Five allied professionals responded to the survey, one from the North Slope Borough, one from Bethel and three employed as wildlife biologists for USGS. Veterinary services were limited in the two rural regions. It was more readily available for the biologists, but demand was listed as being greater than availability. It was universally agreed that there are conditions in Alaska requiring specific training or experience with regard to veterinary services. It was also agreed that providing the first two years of training at UAF would help increase the availability of much needed veterinary services in Alaska.

All survey respondents were asked if there were any additional comments they would like to add concerning the proposed UAF program. Three of every four responses were in favor of the proposal. Many insightful responses were provided both in favor of and against the proposal; all are included in Appendix D.

Those individuals expressing an interest in further contact concerning the proposed degree program at UAF who provided their contact information are listed in Appendix E.

Published veterinary research identified 2011 as "World Veterinary Year". From its original designation as 'animal doctors' the veterinary profession has evolved to be recognized for its contributions to the 'One Health' initiative. It is anticipated to be the 18<sup>th</sup> fastest growing occupation in the US between 2008 and 2018. But with that growth, comes concern over the ability to fill the vacant positions. Veterinary shortages are already witnessed in numerous specialties and regions around the US, including in many Alaska regions. Although lack of capacity at colleges is identified as one of the leading causes, \$50 million in public funding has been pulled from the nation's 28 veterinary schools in the past two years. The institutions are responding by increasing tuition, even though the average debt of veterinary graduates is increasing about four times as fast as veterinary salaries.

Alaska, long thought to be immune to outside economic and social influences, finally felt the effect of the recession that has plagued the Lower 48. The state lost jobs in 2009 and is expected to do the same in 2010. Alaska's population has grown steadily, at a higher rate than that in the rest of the US, although many rural areas have reported difficulties in retaining younger adults and women. The rural population loss trend was not unique to Alaska, but experienced nationwide.

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# **Figures**

Figure 1: Practice History, Clinical Veterinarians

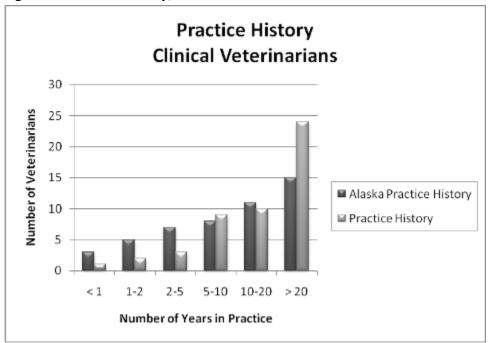
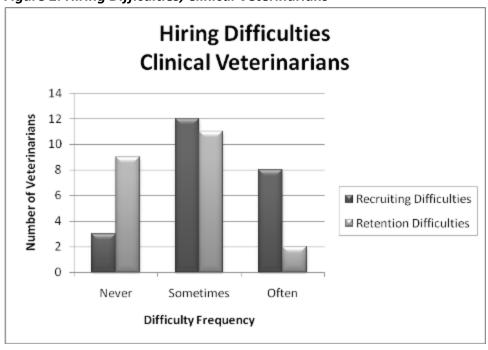


Figure 2: Hiring Difficulties, Clinical Veterinarians



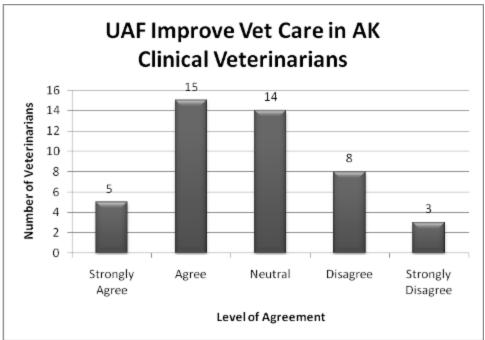


Figure 3: Will UAF Improve Veterinary Care in Alaska, Clinical Veterinarians

Figure 4: Practice History, Non-Clinical Veterinarians

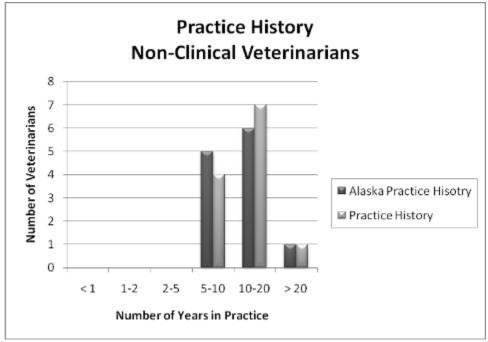




Figure 5: Recruiting Difficulties, Veterinary Employers

# **Tables**

Table 1: Enrollment Statistics, US Veterinary Medicine Colleges

Enrollment Statistics - US Veterinary Medicine Colleges												
									Average		T	Average
School	Applican	Contra	In-Sta 💌	Othe	App Accepte	Contra	In-Stat	Oth€▼	GPA 💌	GRE 💌		
Auburn University	681				95	42	40	13	3.57	1120		
UC Davis	1067	546	78	443	133	2	126	5				
Colorado State University	1834	181	266	1387	138	31	75	32		1165		
Cornell University*												
University of Florida	862		301	561	88		82	6	3.31	1141		
University of Georgia	572	110	187	275	102	25	76	1	3.54	1109		
U of Illinois - Urbana*												
Iowa State University*												
Kansas State University	1107	31	156	920	108	8	46	54	3.5	1179		
Louisiana State University	674	51	120	503	87	11	59	16	3.78	1161		
Michigan State University	923				106		74	32	3.66	1176		
University of Minnesota	1033		227	806	100		55	45	3.58	1190		
Mississippi State University**	400		80	320	72	5	36	31	3.55	1000		
University of Missouri*												
North Carolina State University	732		209	523	80		62	18	3.7	1200		
Ohio State University	802		281	521	140		92	48	3.71	1219		
Oklahoma State University	452		116	336	82		58	24	3.56	1105		
Oregon State University	511		97	414	56		41	16	3.62	1180		
University of Pennsylvania	1200		250	950	125		43	82	3.61	1288		
Purdue University	659		111	548	70		40	30	3.65	2000		
University of Tennessee	825		169	656	85		60	25	3.6	1141		
Texas A & M University	369		279	90	132		126	6	3.64	1163		
Tufts University	704				87		46	41	3.66	1320		
Tuskegee University*												
Virginia-Maryland Regional College		894	305	589	95		79	16	3.59	1849		
Washington State University	940	220	138	582	99	27	56	16	3.653	1131		
Western University	738				104				3.26	1123		
University of Wisconsin	1047	-	205	842	80				3.67	1262		
	18132	2033	3575	11266	2264	151	1372	557	3.59	1237		
* Information not available												
** Averages												
NOTE: Statistics are those most rec	ently publish	ed on colle	ege websi	ite.								

Table 2: Fastest Growing Occupations, 2008 and Projected 2018

2008 National Employment Matrix title and code		Major occupational group	Emple	Employment		2008-18	Median Annual	Most significant source of postsecondary education or
		major occupational group	2008	2018	Number	Percent	wage quartile,	training
Biomedical engineers	17-2031	Professional and related	16.0	27.6	11.6	72.02	VH	Bachelor's degree
Network systems and data communications analysts	15-1081	Professional and related	292.0	447.8	155.8	53.36		Bachelor's degree
Home health aides	31-1011	Service	921.7	1382.6	460.9	50.01	VL	Short-term on-the-job training
Personal and home care aides	39-9021	Service	817.2	1,193.0	375.8	45.99	VL	Short-term on-the-job training
		Management, business, and						
Financial examiners	13-2061	financial	27.0	38.1	11.1		VH	Bachelor's degree
Medical scientists, except epidemiologists	19-1042	Professional and related	109.4	153.6	44.2	40.36		Doctoral degree
Physician assistants	29-1071	Professional and related	74.8	103.9	29.2	38.99		Master's degree
Skin care specialists	39-5094	Service	38.8	53.5	14.7	37.86	L	Postsecondary vocational award
Biochemists and biophysicists	19-1021	Professional and related	23.2	31.9	8.7	37.42		Doctoral degree
Athletic trainers	29-9091	Professional and related	16.3	22.4	6.0	36.95		Bachelor's degree
Physical therapist aides	31-2022	Service	46.1	62.8	16.7	36.29	L	Short-term on-the-job training
Dental hygienists	29-2021	Professional and related	174.1	237.0	62.9	36.14		Associate degree
Veterinary technologists and technicians	29-2056	Professional and related	79.6	108.1	28.5	35.77	L	Associate degree
Dental assistants	31-9091	Service	295.3	400.9	105.6	35.75	L	Moderate-term on-the-job training
Computer software engineers, applications	15-1031	Professional and related	514.8	689.9	175.1	34.01		Bachelor's degree
Medical assistants	31-9092	Service	483.6	647.5	163.9	33.9	L	Moderate-term on-the-job training
Physical therapist assistants	31-2021	Service	63.8	85.0	21.2	33.28		Associate degree
Veterinarians	29-1131	Professional and related	59.7	79.4	19.7	32.95	VH	First professional degree
	l							Work experience in a related
Self-enrichment education teachers	25-3021	Professional and related	253.6	334.9	81.3	32.05	Н	occupation
	l	Management, business, and						l '
Compliance officers, except agriculture, construction, health	13-1041	financial	260.2	341.0	80.8	31.05	н	Long-term on-the-job training
Occupational therapist aides	31-2012	Service	7.8	10.2	2.4	30.74	L	Short-term on-the-job training
Environmental engineers	17-2081	Professional and related	54.3	70.9	16.6	30.62	VH	Bachelor's degree
Pharmacy technicians	29-2052	Professional and related	326.3	426.0	99.8	30.57	L	Moderate-term on-the-job training
Computer software engineers, systems software	15-1032	Professional and related	394.8	515.0	120.2	30.44	VH	Bachelor's degree
Survey researchers	19-3022	Professional and related	23.4	30.5	7.1	30.36	Н	Bachelor's degree
Physical therapists	29-1123	Professional and related	185.5	241.7	56.2	30.27		Master's degree
,		Management, business, and		2		20.2.		
Personal financial advisors	13-2052	financial	208.4	271.2	62.8	30.13	VH	Bachelor's degree
Environmental engineering technicians	17-3025	Professional and related	21.2	27.5	6.4	30.1	H	Associate degree
Occupational therapist assistants	31-2011	Service	26.6	34.6	7.9	29.78		Associate degree
Fitness trainers and aerobics instructors	39-9031	Service	261.1	337.9	76.8	29.41	l ï	Postsecondary vocational award

Source: Employment Projections Program, U.S. Department of Labor, U.S. Bureau of Labor Statistics

# **Appendices**

## Appendix A: List of Potential Respondents

The list began as a list of licensed Alaska veterinarians, but was augmented to include owners and managers of clinical practices as well as allied professionals and students. The first category identifies their specialty in regards to this study as follows:

C = Clinical Veterinarian

NC = Non-Clinical Veterinarian

Mgr = Manager of a clinic

O = Owner of a clinic

S = Student

AP = Allied Professional

T = Vet Tech

Any entries still labeled as P Vet indicates that we were unable to obtain contact information for them. They are listed in the state database as being licensed in the state, but they either did not provide contact information, or the information they did provide was outdated.

	Beckmen,	
NC	Kimberlee	ADF&G Veterinarian
С	Rodger, Elizabeth	After Hours Emergency Veterinary Clinic
	Farris, Sandi	AK Equine & Small Animal Hospital or Harmony Vet Services
NC	Grohs, Julie	AK Equine and Small Animal Hospital
	Donohue, Brenda	AK Veterinary Examining Board
	Hollick, Mary Ann	AKVMA Board Member / AVMA Alternate / Alaska Pet Care
	Spalding, Harold	AKVMA Board Member / AVMA Delegate'
	Meyer, Tom	AKVMA Board Member / District XI Rep
P Vet	Brown, John-Edd	Alaska Equine and Small Animal Hospital
	Van Pelt, R	Alaska Vet Med Clinic
С	Law, David	Alaska Veterinary Clinic
С	Mc Williams, Lea	Alaska Veterinary Clinic
С	Wingerter, Lindsay	Alaska Veterinary Clinic
	Wooldridge,	, , , , , , , , , , , , , , , , , , , ,
С	Gerald	Alaska Veterinary Clinic
С	Froeschle, Jerry	Alaska Veterinary Clinic
Mgr	Ashley	Alaska Veterinary Clinic
C	Payne, Patricia	Alaska Veterinary Clinic
M	Barbara	All Creatures Veterinary Clinic
	Montalbano,	·
С	Judith	All Creatures Veterinary Clinic
С	Bailey, Paul	All Creatures Veterinary Clinic
С	Barnes, Susan	All Creatures Veterinary Clinic
С	Hamilton, Lannie	All Creatures Veterinary Clinic
С	Hutchison, Dianne	All Creatures Veterinary Clinic
С	Masteller, Judith	All Creatures Veterinary Clinic
С	Perbue, Kelly	All Creatures Veterinary Clinic
C & O	Rehn, Joanne	All Creatures Veterinary Clinic
C & O	Reagan, Kelly	Anchorage Mobile Vet Services
C & O	Thornell, Deanna	Animal House Vet Clinic
NC	Bradley, Mike	ANTHC/Emergency Preparedness
NC	Tuomi, Pamela	ASLC
NC	Fuller, Jay	Assistant State Veterinarian
C & O	Stuve, Val	Aurora Animal Clinic
С	Peach, Gregory	Aurora Animal Clinic
С	Webb, S	Aurora Animal Clinic
С	Cole, Barbara	Aurora Animal Clinic
С	Maddux, Jeanne	Aurora Animal Clinic
P Vet	Lee, Rebecca	Aurora Animal Clinic
C & O	Zachel, Cortland	Ballaine Vet Clinic

С	Sept, Robert	Bering Sea Animal Clinic
С	Hambach, Andrea	Big Lake Animal Hospital
C & O	Baetsle, Bryan	Big Lake Susitna Vet Hospital
С	Dziuba, Rachel	Bridge Veterinary Service
C & O	Hunt, David	Chair AK Veterinary Examining Board / Sitka Animal Hospital
C & O	Battig, Deborah	Chena Ridge Veterinary Clinic
C & O	Thomas, Jon	Chester Valley Veterinary Hospital
	Mc Gregor,	
С	Thomas	Chugiak Veterinary Practice
Mgr	Rebecca	College Village Animal Clinic
C	Nicholson, Peter	College Village Animal Clinic
С	Velsko, Alice	College Village Animal Clinic
C & O	Basler, Jon	College Village Animal Clinic
P Vet	McDaniel, Leslie	College Village Animal Clinic
C & O	Rapp, Scott	Cornerstone Animal Hospital
С	Trout, Cynthia	Cornerstone Animal Hospital / Alpine AH
С	Crusberg, Clinton	Delta Vet Service
NC	Comerci, Linda	Department of Agriculture
C	Kunch, Virginia	Diamond Animal Hospital
С	Seeba, Delwin	Diamond Animal Hospital
С	Baugh, Pat	Diamond Animal Hospital
С	Elton, Cara	Diamond Animal Hospital
С	Merrigan, Jamie	Diamond Animal Hospital
С	Riddle, Michael	Diamond Animal Hospital
C	Schoeffler,	Diamond Ammai nospitai
С	Kristofer	Diamond Animal Hasnital
С		Diamond Animal Hospital
	Varman, Marion	Diamond Animal Hospital
С	De Krey, Lesley	Douglas Island Animal Clinic
С	Wolfe, Elizabeth	Elizabeth Wolfe Veterinary Services
С	Kaplan, Heather	Far Country Animal Hospital
С	Richardson, Cindy	Far Country Animal Hospital
6 8 6	Whittington,	For Country Animal Hamital
C & O	Michael	Far Country Animal Hospital
С	Diment, Stanley	Far Country Animal Hospital
0	Cassandra	Far Country Animal Hospital
С	Collins, Cynthia	Far Country Animal Hospital
С	Hefley, Catherine	Far Country Animal Hospital
С	Taylor, Amanda	Far Country Animal Hospital
NC	Lombardi,	Fadaval Vatavia avian
NC	Rosemarie	Federal Veterinarian
NC	Philo, Mike	Federal Veterinarian / Board Member AKVMA
С	Perdue, Kelly	Fill in at All Creatures Veterinary Clinic
С	Forster	Fill in for Dr. Zack all summer. Needs paper survey
C & O	May, Mark	Golden Heart Veterinary Services
С	Rouge, Melissa	Golden Heart Veterinary Services
C & O	Tuomi, Jack	Highland Animal Clinic

С	Tuomi, Jennifer	Highland Animal Clinic
С	Frederickson, Paul	Hillside Pet Clinic
	Gump, Willard	
С	(Rusty)	Hillside Pet Clinic
	Bluestone-Fhlug,	
С	Pamela	Hillside Pet Clinic
С	Craig, Vicki	Homer Veterinary Clinic
С	Bando, Jennifer	Homer Veterinary Clinic
P Vet	Mc Collum, Elaine	Homer Veterinary Clinic
	Sherwood,	
P Vet	Dorothy	Homer Veterinary Clinic
С	Broshes, Ralph	Homer Veterinary Clinic/ retired
С	Dowler, Angela	House Calls
C & O	New, Michael	Juneau Vet Hospital
		Juneau Vet Hospitalvet tech student/would love program at
Student		UAF
С	Savage, Katharine	Katherine Savage DVM
C & O	Mc Cartan, Richard	Kenai Veterinary Hospital
С	Wisnewski, Curtis	Kenai Veterinary Hospital
С	Mangis, Monica	Ketchican Veterinary Clinic
С	Hopkins, Phillip	Ketchikan Veterinary Clinic
C & O	Walton, Dan	Ketchikan Veterinary Hospital
0	Berg, Doug	Kodiak Veterinary Clinic
С	Johnson, Jeffrey	Kodiak Veterinary Clinic
С	Johnson, Angela	Kodiak Veterinary Clinic
P Vet	Rodger, Betsy	Mt McKinley Animal Hosital
C & O	DeLeon, Krislyn	Mt. McKinley Animal Hospital
С	Flamme, Scott	Mt. McKinley Animal Hospital
С	Sutherland, Mary	Mt. McKinley Animal Hospital
С	Wood, Rebecca	Mt. McKinley Animal Hospital
С	Bacon, Nadia	Mt. McKinley Animal Hospital
С	Heywood, Eden	Mt. McKinley Animal Hospital
	Hansen, Cristina	Mt. McKinley Animal Hospital
P Vet	Erickson, Jayne	Mt. McKinley Animal Hospital
C & O	Leedy, Derrick	Nome Veterinary Hospital
С	Eastman, Margaret	North Pole Veterinary Hospital
С	Lovely, Denali	North Pole Veterinary Hospital
С	Robertson, Daniel	North Pole Veterinary Hospital
C & O	Henry, Shauna	North Star
C & O	Pietila, Bradley	North Star
C & O	Beck, Teresa	North Star
P Vet	Hurley, Anne	Northern Lights Vet and Laser
C & O	Schmidt, Paula	Northern Lights Veterinary Clinic
С	Sperling, Ken	Northern Lights Veterinary Clinic/fill-in
	Humm-Beatty,	
С	Hilary	Not practicing/Living in Canada/Hopes to return to AK.

C & O	Bauder, Burgess	Owner & Clinical - Call back at 3:30 7/29
С	Williams, Ronald	Palmer Veterinary Clinic
С	Tuomi, John	Palmer Veterinary Clinic
NC	Espey, Lisa	Passages (Cremation Services)
C	Nelson, Stuart	Pet Emergency Treatment
С	Diederich, Melissa	Pet Emergency Treatment Inc.
С	Doty, Kathleen	Pet Emergency Treatment Inc.
С	Hurd, Colin	Pet Emergency Treatment Inc.
С	Melocik, Allison	
	•	Pet Emergency Treatment Inc.
С	Leibold, Michelle	Pet Emergency Treatment Inc.
0	Kelly, Laura	Pet Emergency Treatment Inc.
С	Kesting, Shannon	Pet Emergency Treatment, Inc.
С	Michetti, Christine	Pet Stop
С	Kavanaugh, Siri	Pet Stop
С	DiRuzzo, Shannon	Pet Stop
С	Palmatier, Todd	Pet Stop
C & O	Wilson, Riley	Pet Stop / and AK Zoo
Allied	Peacock, Lily	
Prof		Polar bear biologist for usgs
	VerSteeg,	
	Catherine	President AKVMA
	Love, Sarah Beth	President Interior VMA
Practice		Raven Veterinary Service
Student	Duncan, Gale	Ravenwood Vet Student
С	Frost, Marian	Ravenwood Veterinary Clinic
С	Albert, Denise	Ravenwood Veterinary Clinic
С	Whiton, Susan	Ravenwood Veterinary Clinic
С	Hawn, Catherine	Ravenwood Veterinary Clinic
C & O	Wagnon, Susan	Ravenwood Veterinary Clinic
С	Cuthbert, Lorelei	Ravenwood Veterinary Clinic
C & O	Muschany, Charles	Sand Lake Animal Hospital
NC/Key	Wilson, Myra	Secretary AKVMA/Mgr Anch Animal Care & Control Center
NC	Castrodale, Louisa	Section of Epidemiology, DHSS
	Hall, Matthew	Seward Animal Hospital
С	Warmuth, Valerie	Soldotna Animal Hospital
C & O	Bowser, Timothy	Soldotna Animal Hospital
С	Hermansen, Marie	Soldotna Animal Hospital
	Sessions,	
С	Katherine	Soldotna Animal Hospital
P Vet	Lapthorne, Sarah	Southeast Alaska Animal Clinic
C	Kramer, Lisa	Southeast Alaska Vet Clinic
С	Taylor, Patrick	Southeast Alaska Vet Clinic
T	Vogelsand, Robert	Southeast Alaska Vet Clinic Southeast Alaska Vet Clinic
	Lobaugh, Clifford	Southeast Alaska Vet Clinic
<u></u>	• .	
C	Torrence, Steven	Southeast AK Vet Clinic/Former Chair AK Vet Examining Board
C & O	Ecklund, Dyan	Southside Animal Clinic

С	Schmidt, Karin	Southside Animal Clinic
С	Zerkel, Kira	Southside Animal Clinic
Owner	Easton, Tracy	Southside Animal Hospital
C	Webb, Jesse	Southside Animal Hospital
C	Wishart, Shawna	Southside Animal Hospital
С	Guillory, Melissa	Southside Animal Hospital
NC	Gerlach, Robert	State Veterinarian / Board Member AKVMA
C	McCutty, Chris	The Pet Stop
C	Chang, Linda	Treasurer AKVMA
	Mersch, Stephen	Twin Cities Vet Clinic / Retired
<u> </u>	Huhndorf, Mary	*
C	· · · · · · · · · · · · · · · · · · ·	Twin Cities Veterinary Clinic
C	Goodwin, Katie	Twin Cities Veterinary Clinic
	Parker, Robert	Twin Cities Veterinary Clinic
С	Mersch, Deborah	Twin Cities Veterinary Clinic
С	Perkovich, Tabitha	Twin Cities Veterinary Clinic
C & O	Delker, James	Twin Cities Veterinary Clinic / President-Elect AKVMA
NC	Rosa, Cheryl	US Arctic Research Commission
NC	Mulcahy, Daniel	USGS
C & O	Hawkins, Kelly	Valdez Veterinary Clinic
С	Hawkins, Kathryn	Valdez Veterinary Clinic
С	Tobey, Robert	Valley Veterinary Center
	Frederickson,	VCA Alaska Pet Care Animal Hospital
P Vet	Jacqueline	
	Van Duine,	
P Vet	Katherine	VCA Alaska Pet Care Animal Hospital
С	Simmons	VCA Alpine
С	Powers, Chad	VCA Alpine
С	Averill, Coleen	VCA Alpine
P Vet	Howell, Vicki	VCA Alpine
Practice		VCA Animal Pet Care Hospital
Practice		VCA Bearing Sea Animal Hospital
P Vet	Johnson, Craig	VCA Eagle River
P Vet	Kuchinka, Gary	VCA Eagle River
P Vet	Lamere, Lorelie	VCA Eagle River
С	Martell, Katie	VCA Eagle River Animal Hospital
С	Hanlon, Julie	VCA Eagle River Animal Hospital
С	Bailey, Laura	VCA Eagle River Animal Hospital
С	Capitan, Alison	VCA Eagle River Animal Hospital
P Vet	Howe, David	VCA East Anchorage
0	Lewis, Savannah	VCA East Anchorage Animal Hospital
С	Lewis, Liesl	VCA East Anchorage Animal Hospital
С	Keele, Sheri	VCA East Anchorage Animal Hospital
С	Townsend, Mario	VCA East Anchorage Animal Hospital
	.,	
0	French, Leelani	Veterinary Specialist of AK / filled out E in terms of vet techs
O & O	French, Leelani Edwards, Michael	Veterinary Specialist of AK / filled out E in terms of vet techs  Veterinary Specialist of Alaska

C & O	Meyer, Phillip	Wasilla Vet Clinic
С	Neils, Stacey	Wasilla Veterinary Clinic
С	Petit, Hillary	Wasilla Veterinary Clinic
C & O	Morris, James	Wasilla Veterinary Clinic
С	Hill, Kenneth	Waterways VeterinaryClinic
С	Page	Waterways VeterinaryClinic
P Vet	Geitz, Gregory	West Anchorage Veterinary Clinic
Practice		West Anchorage Veterinary Clinic
C	Pence, Suzanne	West Mountain Animal Hospital
AP	Hatch, Scott	Wildlife biologist usgs
C	Hagee, James	Triume stologist augs
С	Colwell, David	
С	Hinckley, Scott	
P Vet	Bell, Pamela	
C	Gelvin, Colleen	
P Vet	Leach, James	
C	Hall, Marna	
С	Higgs, Karen	
С	Hightower, John	
С	Holland, Sabrieta	
C	Michels-Brophy,	
С	Karen	
С	Lane, Lisette	
С	Nevill, Heather	
С	Nybakken, Gerald	
С	Olson, Jeanne	
С	Pironis, Jennifer	
С	Pittman, Sammy	
С	Preziosi, Diane	
С	Rose, Tamara	
С	Shanley, Theresa	
С	Smart, Sarah	
С	Tremaine, Leslie	
С	von Pfeil, Dirsko	
С	Walker, Victor	
С	Wellington, Kevin	
P Vet	Reynolds, Arleigh	
P Vet	Sotomayor, Liliana	
P Vet	Steinberg, Molly	
P Vet	Vosburg, Victoria	
C	Parham, M	
P Vet	Blake, John	
P Vet	O'Hara, Todd	
P Vet	Rasmusson, Jack	
NC	Goertz, Caroline	
C	Lavach, John	
	Lavacii, Joini	

Monetti Karl	
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Coughlin, Kevin	
Dawson, Tony	
Deal, Nicole	
Delker, Deborah	
Dent, Susan	
Dieden, Jean	
Doty, Kathleen	
Edwards, Martha	
Edwards, Melissa	
Eger, Doreen	
Eliscu, Alicia	
Ellingson, Earl	
Engen, Mark	
Estes, Lauren	
Evans, Alina	
Farstvedt, Ellis	
Fassig, Samuel	
	Deal, Nicole Delker, Deborah Dent, Susan Dieden, Jean Doty, Kathleen Edwards, Martha Edwards, Melissa Eger, Doreen Eliscu, Alicia Ellingson, Earl Engen, Mark Estes, Lauren Evans, Alina Farstvedt, Ellis

P Vet	Ferretti, Lisa	
P Vet	Fleming, Cheri	
P Vet	Ford, Scott	
P Vet	Frank, Richard	
P Vet	Gaarder, James E.	
P Vet	Gore, Berton	
P Vet	Grady, Glen	
P Vet	Greer, Martin	
P Vet	Griffitts, Caroline	
5	Guerrero-	
P Vet	Simmons, Tina	
P Vet	Haltmann, Andrea	
P Vet	Hartshorn, Sharon	
P Vet	Hempstead, Jayne	
P Vet	Hickey, Stephanie	
P Vet	Hunt, Timothy	
P Vet	Hunter, Paul	
	Huntington,	
P Vet	Kathleen	
P Vet	Jandt, Randi	
P Vet	Johnson, Kobi	
P Vet	Johnson, Shawn	
P Vet	Kilby, Christina	
P Vet	Klepzig, Andrea	
P Vet	Kroloff, Leslie	
P Vet	Lewis, Richard	
P Vet	Lloyd, Mark	
P Vet	Loibl, Michael	
P Vet	Lowry, Steven	
P Vet	Masheimer, Paul	
	McDonald,	
P Vet	Lawrence	
P Vet	McDowell, Keri	
P Vet	McGill, Kathleen	
P Vet	McMillan, Susan	
P Vet	Medkeff, Karen	
P Vet	Meunier, James	
P Vet	Meyers, Cheryl	
P Vet	Moeller, Robert	
P Vet	Monfore, Gene	
	Montgomery,	
P Vet	Kathryn	
	Myhre Blevins,	
P Vet	Beth	
P Vet	Nader, Paul	
P Vet	Nance, Gerald	
rvel	ivalice, Geraiu	

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P Vet	Nicholson, David	
P Vet	Nielsen, Carol	
P Vet	Novosad, Lou	
P Vet	Obal, Nadine	
P Vet	Palmer, Lauren	
P Vet	Palmini, David	
P Vet	Peterson, Richard	
P Vet	Phillips, Kathryn	
P Vet	Pietsch, Gregory	
P Vet	Pifer, Paul	
P Vet	Pinto, Mercedes	
P Vet	Rausch, Robert	
P Vet	Reedy, Douglas	
P Vet	Rehm, Michael	
P Vet	Reinart, Donald	
P Vet	Rooks, Robert	
	Rosenkrantz,	
P Vet	Wayne	
P Vet	Ruby, Adrienne	
P Vet	Sanders, Connie	
P Vet	Scherr, Rick	
P Vet	Scott, James	
P Vet	Seymour, Amanda	
P Vet	Shepard, Eugene	
P Vet	Smedberg, Erica	
P Vet	Smith, Philip	
P Vet	Smith, Terry	
	Smith, Vicki	
P Vet	Snider, Robert	
P Vet	Starks, Vern	
P Vet	Sykes, John	
P Vet	Taylor, William	
P Vet	Thunell, Timothy	
P Vet	Valverde, Celia	
P Vet	Vandenberg, Mark	
P Vet	Vanek, Vicki	
P Vet	Voehl, Kristen	
P Vet	Vukich, Nicholas	
P Vet	Walsh, Richard	
P Vet	Wegner, Matthew	
P Vet	Weiman, Scott	
P Vet	Welsh, Paula	
P Vet	Willer, Randy	
	Wilson, Marilyn	
P Vet	Woodruff, Billy	
D Vot	Jack	
P Vet	Jack	

	Yeltatzie,	
P Vet	Samantha	
P Vet	Zwolinski, Katrina	

#### Appendix B: Letter of Introduction to Licensed Veterinarians



John Blake Michael Harris Karsten Hueffer Todd O'Hara Jon Runstadler Barbara Taylor

#### **UAF Veterinary Medicine Planning Task Force**

PO Box 757270, Fairbanks, AK 99775-7270

July 20, 2010

Dear colleague,

The University of Alaska Fairbanks (UAF) is exploring options to develop a program to promote veterinary medicine as a viable career opportunity for Alaskans. Equally important for the state are research, graduate veterinary education, professional services for the veterinary community, and continuing education in animal health and disease. Our goal is to enhance veterinary coverage in Alaska; train veterinarians with an understanding of Alaskan needs; and promote a collaborative effort between human medical, veterinary medical and public health professions. Our specific interests include but are not limited to: public health, rural veterinary medicine, quality and safety of subsistence foods, population health of Alaskan wildlife, zoonotic disease, sustainable agriculture, toxicology, environmental contaminants, emerging disease and the effects of global warming.

A particularly attractive option is the development of a new School of Veterinary Medicine and Environmental Health Sciences (VMEHS). The foundation of this new School will be an accredited "2+2 program" between UAF and the College of Veterinary Medicine and Biomedical Sciences, Colorado State University. Students will complete their pre-veterinary program and the first 2 years of their professional program at UAF. Their final 2 years will be at the veterinary teaching hospital, CSU. In addition to the professional program leading to a DVM, we will still offer undergraduate and graduate training in environmental health and biomedical sciences (e.g. pre-vet, pre-med, pre-dent, B.S., M.S. and Ph.D.).

You may be contacted to participate in an online "needs assessment survey". There are many unknowns and we need input from the profession. We want your thoughts on this venture. If you are asked, I hope you will participate. To ensure participation please contact me and provide your e-mail address or a phone number.

If you have questions, suggestions, or comments be sure to phone, write, or e-mail.

Sincerely

John Blake DVM MVetSc Associate Vice Chancellor for Research jeblake@alaska.edu (907) 474-5188

## Appendix C: Surveys

### **Veterinarians in Clinical Practice**

Veterinarians in Clinical Practice
Yelennahans in Chinical Fractice
1. Survey of Practicing Veterinarians
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of veterinary professionals in Alaska. We greatly appreciate the time you are investing to help us with this endeavor.
How long have you been practicing or how long did you practice veterinary
medicine?
Less than 1 Year
1-2 years
2-5 Years
5-10 Years
10-20 Years
More than 20 Years
2. Alaska Experience
2. Alaska Experience
1. How long have you been practicing in or how long did you practice in Alaska?
Less than 1 Year
1-2 Years
2-5 Years
5-10 Years
[ 10-20 Years
More than 20 Years
Do not practice in Alaska
3. Employment
Do you have ownership in or management responsibilities at the clinic at which you
work?
C Yes
C No
Not currently working
C Other

Veterinarians in Clinical Practice
4. Owner/Manager Questions
1. Do you have trouble recruiting veterinarians?
C Never
C Sometimes
C Often
C Unsure
2. Do you have trouble retaining veterinarians?
C Never
C Sometimes
C Often
C Unsure
5. Schooling History
1. Did you grow up or do your undergraduate work in Alaska?
C Yes
C No
6. Leaving AK an obstacle
1. Was leaving the state to attend veterinary school an obstacle to pursuing a veterinary
career?
C Yes
C No
7. Overcome obstacle
Please explain why and how you overcame that obstacle.
E .
▼
8. Additional training

Veterinarians in Clinical Practice
1. In your experience, are there aspects of veterinary medicine in Alaska that require or
would benefit from additional training, beyond that provided in veterinary schools in the
Lower 48?
C Yes
C No
The state of the s
9. Aspects and kinds of additional training
1. What aspects require additional training?
. That aspects require additional during.
*
What kind of training is required or desirable?
10. AK schooling improve veterinary care in AK
1. Please indicate your level of agreement with the following statement: "Providing at least two years of veterinary school education in Alaska will improve veterinary care in the state."    Strongly Agree
Tr. Final Questions
1. Do you have any other comments related to veterinary education in Alaska?
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T

Veterinarians in Clinical Practice	ı
2. If you have any questions about the study or would like to be contacted if the degree	1
program is instituted, please provide your name and contact information. Your answers	١
to this survey will not be associated with you in any way.	١
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## **Veterinarians in Clinical Practice – Key Informants**

Veterinarians in Clinical Practice / Key Informants
1. Survey of Practicing Veterinarians
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of veterinary professionals in Alaska. We greatly appreciate the time you are investing to help us with this endeavor.
1. How long have you been practicing or how long did you practice veterinary
medicine?
Less than 1 Year
1-2 years
2-5 Years
5-10 Years
10-20 Years
More than 20 Years
2. Alaska Experience
1. How long have you been practicing in or how long did you practice in Alaska?
Less than 1 Year
1-2 Years
2-5 Years
5-10 Years
10-20 Years
More than 20 Years
Do not practice in Alaska
3. Employment
1. Do you have ownership in or management responsibilities at the clinic at which you
work?
C Yes
C No
C Not oursetly working
C Other

Veterinarians in Clinical Practice / Key Informants
4. Owner/Manager Questions
1. Do you have trouble recruiting veterinarians?
C News
C Sometimes
C Otten
C Uniure
2. Do you have trouble retaining veterinarians?
C Never
C Sometimes
C Often
C Unaure
5. Schooling History
Did you grow up or do your undergraduate work in Alaska?
C Yes
C No
6. Leaving AK an obstacle
Was leaving the state to attend veterinary school an obstacle to pursuing a veterinary
career?
C Yes
C No
7. Overcome obstacle
Please explain why and how you overcame that obstacle.
E
<u>▼</u>
8. Additional training

Veterinarians in Clinical Practice / Key Informants
1. In your experience, are there aspects of veterinary medicine in Alaska that require or
would benefit from additional training, beyond that provided in veterinary schools in the
Lower 48?
C Yes
C No
9. Aspects and kinds of additional training
1. What aspects require additional training?
2
₩.
2. What kind of training is required or desirable?
A
10. AK schooling improve veterinary care in AK
1. Please indicate your level of agreement with the following statement: "Providing at least two years of veterinary school education in Alaska will improve veterinary care in the state."  Congly Agree  Agree  Neutral  Disagree  2. Please explain your level of agreement.
11. When move to AK
1. At what point did you decide to move to Alaska? (i.e., before, during or after vet

Veterinarians in Clinical Practice / Key Informants
2. What attracted you to Alaska?
2. What attracted you to Alaska:
<u> </u>
3. Thinking about your classmates in veterinary school, do you think many veterinary school graduates would consider moving to Alaska to practice, or are there only a few veterinarians who are interested?
4. Have you talked with high school or college studfents about veterinary medicine as a career?
C Yes
C No
12. Students impression of school locations
12. Students impression of school locations
1. What, if anything, have the students said about locations of veterinary schools as a
consideration in whether to enter the profession?
A.
<u>-</u>
13. How it could affect care in AK
How do you think a veterinary medicine program at the University of Alaska Fairbanks would affect veterinary care and veterinary medicine as a profession in Alaska?
2. What do you think of the job prospects in Alaska for a newly graduated veterinarian, now and in the future?
<u>×</u>
14. Final Questions
Do you have any other comments related to veterinary education in Alaska?
1. Do you have any other comments related to veterinary education in Alaska?

Veterinarians in Clinical Practice / Key Informants
2. If you have any questions about the study or would like to be contacted if the degree
program is instituted, please provide your name and contact information. Your answers
to this survey will not be associated with you in any way.
<u>*</u>

#### **Non-Clinical Veterinarians**

Veterinarians not in Clinical Practice
1. Survey of Other Veterinarians
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of veterinary professionals in Alaska. We greatly appreciate the time you are investing to help us with this endeavor.
How long have you been in veterinary medicine or a related field such as public health?
Less than 1 Year
1-2 years
2-5 Years
☐ S-10 Years
10-20 Years
More than 20 Years
2. Alaska Experience
1. How long did you or have you been working in Alaska?
Less than 1 Year
2-5 Years
5-10 Years
10-20 Years
More than 20 Years
Do not practice in Alaska
3. Employment
Do you practice veterinary medicine or are you in an allied profession?
C Practice Veterinary Medicine
Other / Allied Profession
4. What type of work?

Veterinarians not in Clinical Practice
1. What type(s) of work do you do?
A
<u> </u>
5. Number of Professionals in Alaska
1. Thinking of veterinary professionals in Alaska doing the type of work that you do, do
you think there are:
C Too Many
C Just Enough
C Too Few
6. Obstacles
What do you think are the obstacles to offering additional positions or to recruiting and retaining qualified individuals?
7. Seasonal
Does the demand for veterinary work in your vield vary greatly by season (e.g. higher during the summer field research season)?
C Alveys
C Sometimes
C Never
8. Seasonal Demands
Is there unmet demand for year-round work, or is recruiting seasonal veterinarians sufficient to meet your organization's needs?
C Unmet year-round demand
C Gessonal hirs are sufficient
C Other
9. Grow up in AK

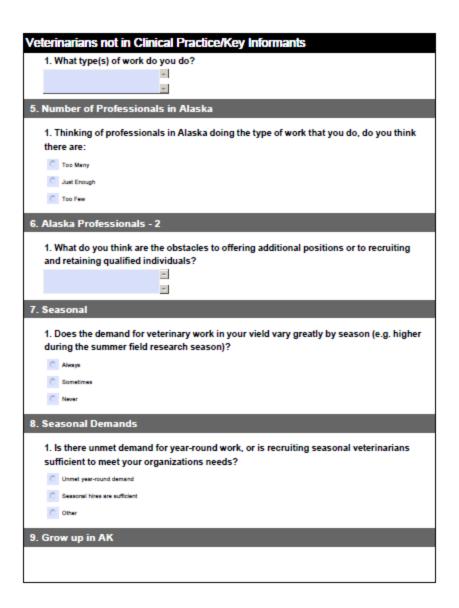
Veterinarians not in Clinical Practice
1. Did you grow up in or do your undergraduate work in Alaska?
C Yes
C No
10. Leaving AK an obstacle
1. Was leaving the state to attend veterinary school an obstacle?
C  Yes
C No
NO NO
11. Explain obstacle
4. Diama baiafic anniais the abatesian and bannon access these
Please briefly explain the obstacles and how you overcame them.
40 A J PC I AV T
12. Additional AK Training?
1. In your experience, are there aspects of veterinary medicine, or the field you are
currently in, in Alaska that require or would benefit from additional training, beyond that
provided in veterinary schools in the Lower 48?
C Yes
C No
13. Aspects and kinds of additional training
1. What aspects require additional training?
■
2. What kind of training is required or desirable?
N N
14. AK schooling increase number of veterinarians

Veterinarians not in Clinical Practice
1. To what level do you agree with the statement: "Providing at least two years of
veterinary school education in Alaska will help increase the number of veterinary
professionals working in the state."
C Strongly Agree
C Agree
C Neutral
C Disagree
C Strongly Disagree
2. Why?
E CONTRACTOR DE
15. AK schooled veterinarians better understanding of AK
<ol> <li>To what level do you agree with the statement: "Veterinarians having had at least two</li> </ol>
years of veterinary school education in Alaska will have a better understanding of
Alaska-specific issues.
C Strongly Agree
G Agree
C Neutral
C Disgree
C Strongly Disagree
2. Why?
A
<u>▼</u>
16. Additional Comments
Do you have any other comments related to veterinary education in Alaska?
-

Veterinarians not in Clinical Practice	
2. If you have any questions about the study or would like to be contacted if the degree	٦
program is instituted, please provide your name and contact information. Your answers	-
to this survey will not be associated with you in any way.	-
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## Non-Clinical Veterinarians – Key Informants

Veterinarians not in Clinical Practice/Key Informants
1. Survey of Other Veterinarians
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of veterinary professionals in Alaska. We greatly appreciate the time you are investing to help us with this endeavor.
How long have you been in a veterinary medicine or related field such as public     health?
Less than 1 Year
1-2 years
2.5 Years
5-10 Years
10-20 Years
More than 20 Years
2. Alaska Experience
1. How long did you or have you been working in Alaska?
Less than 1 Year
1-2 Years
2-5 Years
5-10 Years
10-20 Years
More than 20 Years
Do not practice in Alaska
3. Employment
1. Do you practice veterinary medicine or are you in an allied profession?
C Practice Veterinary Medicine
C Other / Allied Profession
4. What type of work?



Veterinarians not in Clinical Practice/Key Informants
1. To what level do you agree with the statement: "Veterinarians having had at least two
years of veterinary school education in Alaska will help increase the number of
veterinary professionals working in the state."
C Strongly Agree
C Agree
C Neutral
C Disagree
C Strongly Disagree
2. Why?
<u>~</u>
<b>▼</b>
15. AK schooled veterinarians better understanding of AK
To what level do you agree with the statement: "Veterinarians having had at least two
years of veterinary school education in Alaska will have a better understanding of
Alaska-specific issues.
C Strongly Agree
C Agree
C Neutral
C Disagree
C Strongly Disagree
2. Why?
<u>∞</u>
16. Move to AK
1. At what point did you decide to move to Alaska? (i.e. before, during or after vet
school)
2. What attracted you to Alaska?
E
ı

## Veterinarians not in Clinical Practice/Key Informants 3. Thinking about your classmates in veterinary school, do you think many veterinary school graduates would consider moving to Alaska to practice, or are there only a few veterinarians who are interested? 4 Ŧ 4. Have you talked with high school or college students about veterinary medicine or an allied field as a career? C Yes C No 17. Location of school a factor 1. What, if anything, have the students said about locations of veterinary schools as a consideration in whether to enter the profession? - $\overline{\phantom{a}}$ 18. AK vet care and prospects 1. How do you think a veterinary medicine program at the University of Alaska would affect veterinary care and veterinary medicine as a profession in Alaska? Ŧ 2. What do you think of the job prospects in Alaska for a newly graduated veterinarian, now and in the future? T 19. Additional Comments 1. Do you have any other comments related to veterinary education in Alaska? -2. If you have any questions about the study or would like to be contacted if the degree program is instituted, please provide your name and contact information. Your answers to this survey will not be associated with you in any way. -T

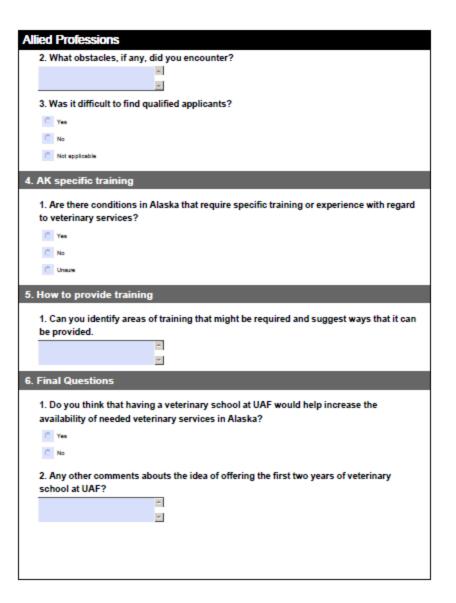
## **Veterinary Employers**

Those Who Might Employ Veterinary Professionals
1. Vet availability/training
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of Veterinary and allied professionals in Alaska. We greatly appreciate the time you are investing to help us with this endeavor.
1. What role does/would a Veterinarian play in your organization?
<u>*</u>
2. Do you have any difficulty recruiting for positions to be filled by Veterinarians?
C Abecays
C Sometimes
C Never
3. Is "standard" Veterinary training sufficient for these positions, or is additional training required?
C Standard training sufficient
C Additional training required
2. Additional training
What kind of additional training would you suggest? (i.e. a Master's in Public Health, training specific to conditions in Alaska, etc.)
<u>•</u>
3. UAF program provide Veterinarians
Do you think that having a Veterinary Medicine program at UAF would help provide qualified professionals for your organization?
C Yes
C No
How and why would a program at UAF provide or not provide qualified professionals for your organization?

# Those Who Might Employ Veterinary Professionals 4. Final Questions 1. What do you think of the job prospects in Alaska for newly graduated Veterinarians, now and in the future? T 2. Any other comments about the idea of offering the first two years of Veterinary school at UAF? 3. If you have any questions about the study or would like to be contacted if the degree program is instituted, please provide your name and contact information. Your answers to this survey will not be associated with you in any way. 4 T.

## **Allied Professionals**

Allied Professions
1. Veterinary Service Needs
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of veterinary and allied professionals in Alaska. We greatly appreciate the time you are investing to help us in this endeavor.
What kinds of veterinary services are important to your organization, community, or constituency?
× ×
2. Are you able to get those services now?
C No
3. If yes, how? If no, which are you unable to get and why?
* ************************************
2. Need fulfillment
Have you tried to create veterinary positions to fill the needs in your organization, community or constituency?
C Yes
C No
Need stready fulfilled
3. Fulfillment details
1. Would you consider your efforts to have been successful?
C Yes
C No
C Partially
C Other



Allied Professions
3. If you have any questions about the study or would like to be contacted if the degree
program is instituted, please provide your name and contact information. Your answers
to this survey will not be associated with you in any way.
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<u></u>

## Students

Student Survey
1. Veterinary Medicine School
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of students in Alaska. We greatly appreciate the time you are investing to help us in this endeavor.
1. Have you ever considered veterinary medicine as a career?
C Yes
C No
2. Would the location of veterinary schools be a factor when thinking about veterinary medicine as a career?
C Yes
C No
3. How likely would you be to pursue veterinary medicine as a career if you could enroll at UAF for the first two years of schooling?
More likely
C About the same
C Less likely
Would not consider vet school anyway
4. Do you have any other comments about the idea of offering the first two years of veterinary school at UAF?
N N
5. If you have any questions about the study or would like to be contacted if the degree program is instituted, please provide your name and contact information. Your answers to this survey will not be associated with you in any way.

## **Guidance/Career Counselors**

Survey of Guidance/Career Counselors
1. Veterinary School
The University of Alaska Fairbanks is considering creating a veterinary medicine program, offering the first two years of veterinary school here in Alaska, in partnership with a veterinary school in the Lower 48, where the final two years of schooling would take place. UAF has commissioned a Needs Assessment to help in its decision. As part of that assessment, we are conducting a brief survey of guidance and career counselors in Alaska. We greatly appreciate the time you are investing to help us in this endeavor.
1. In your experience, do many students consider veterinary medicine as a career?
C Yes
○ No
What factors are most influential in a students decision whether to pursue a career in veterinary medicine?
<ol><li>Considering the number of students in Alaska, do you think there would be sufficient interest in a postgraduate veterinary program at UAF to host a class of:</li></ol>
C 0 Students
C 10 Students
C 20 Students
C 30 Students
C 40 Students
C 50 Students
C More than 50 Students
2. Final Questions
Do you feel that providing the first two years of veterinary medicine education in     Alaska will make Veterinary Medicine a more attractive career option for Alaskan students?
C Yes
C No

rvey of Guidanc	
2. How important is	s it for students to be able to pursue their educational goals within the
state of Alaska, ver	rsus having to enroll at an institution in the Lower 48?
C Unimportant	
C Slightly important	
C Moderately important	
C Important	
C Very important	
C The key factor	
3. Do you have any	other comments related to veterinary education in Alaska?
	▼
to this survey will n	not be associated with you in any way.

#### Appendix D: Open-Ended Responses from All Surveys

#### What types of work do you do?

#### Responses from Non-Clinical Veterinarians

- -Zoological and Wildlife Medicine for an NGO and as a consultant manage animal control facility/provide veterinary servcie to animal control facility
- -Federal regulatory/public health; previously wildlife biology and environmental science.
- -Wildlife veterinary medicine
- -State Veterinarian, regulatory medicine, public health
- -Research (though I practice on the side as a relief vet (small animal))
- -Veterinary Medical Officer Alaska Federal Government USDA
- -Clinical practice
- -routine veterinary practice with dogs, cats and horses
- -state government
- -Public health, environmental health, research relate to contaminants, climate change issues, emergency disaster planning.
- -Wildlife vet for the State of Alaska

#### What role would a Veterinarians play in your organization?

#### Responses from Veterinary Employers

- -A big role. Because we are a Veterinary clinic, Veterinarians are crucial for our success.
- -An associate and in the future, possibly, partner.
- -associate
- -central to our business, we provide general veterinary services to our community
- -CEO, owner, work horse
- -Clinical practice
- -Clinical practice.
- -General small animal practitioner with minimal on-call duties
- -Management Private contractor
- -Oversee our health assessment program for subsistence harvested resources
- -Providing health care for family pets presented at our practice
- -Providing veterinary clinical, diagnostic and treatment services along with client education and mentoring of support staff.
- -Regulatory role: importation regulations, intrastate movement regulations, disease surveillance, disease outbreak response, reindeer slaughter oversight, dairy regulations regarding milk production and shipment, dairy product (cheese, frozen desserts, etc) processing regulations, public health. they work in the clinic
- -To be able to perform medical and surgical procedures required within the parameters of a general small animal practice and be able to handle the associated client/staff relationships.
- -Vet tech: Our technicians play a vital role in our mission to give our patients and clients the highest possible level of care and service. Our technicians and doctors work very closely to accomplish this goal.

- -We are mostly a small animal companion animal hospital. though we do have a handful of clients with goats and sheep that we also provide services to.
- -Vets are the primary producers.

#### What kind of additional training is suggested to fill the positions needed in your organization?

#### **Responses from Veterinary Employers**

- -In addition to a D.V.M. or V.M.D, prefer to have a Ph.D. in pathology or related field.
- -In our situation, experience is essential. New graduates need to have undertaken an internship or have work experience prior to being useful in our practice setting. Additional education is not necessary. We do not have time in our schedules for constant mentoring of new graduates. New graduates do not seem to have the skills necessary to practice veterinary medicine independently, there are certainly exceptions to that but many do not feel that they are capable.
- -More options for on-the-job training opportunities
- -Since ours is a specialty practice, our technicians are expected to have a high level of proficiency and knowledge. Additional training in anesthesia, orthopedics, cardiac surgery is considered when selected technicians for employment.
- -Training and experience in many areas of diagnostics and surgery. Small town AK demands vets to be able and willing to work emergency hours and deal with a wide variety of situations and many unique to both lifestyle of clients and patients that new graduates with minimal experience would maybe feel unprepared for. Training in wildlife medicine is important for working in our location here in Homer.

## What kinds of veterinary services are important to your organization, community, or constituency?

#### **Responses from Allied Professionals**

- -Implantation of satellite transmitters; assessment of disease state; histopathology.
- -Neuters and Spays for pets, vaccinations, basic pet care. (all are important in decreasing rabies risk in our region)
- -Surgical procedures on wild birds under field conditions
- -Wildlife post mortem invstigations; wildlife disease evaluations from biopsy or fecal collections.
- -Work for biology division of usgs. Do a lot of animal tracking. Attaching tracking devices. I work with birds. For years have needed and have had skills of veterinarians to do implants of transmitters in birds. Have Vet on staff Dan Mulcahey.

#### How are you able to get those services, or which are you unable to get and why?

#### Responses from Allied Professionals

- -Because Dan has been on staff for 20 years.
- -Staff veterinarian or paid off-site services, but demands for both of these exceed availability.
- -There is a very short list of qualified individuals, we are forced to schedule our work around their availability
- -These services are available in Bethel, but except for aniak are not available in the other 44 villages of

the YKHC delta

-Through a network of engaged vets, on staff, at allied agencies and universities.

# What at the obstacles to offering additional positions or to recruiting and retaining qualified individuals?

# Responses from Non-Clinical Veterinarians

- -1. Lack of committment by natural resource agencies of the value a veterinarian can bring to them. 2. Unwillingness of natural resource agencies to commit funding and position commitments to hire veterinarians.
- -1. Salary the State of Alaska pays pretty bad for a veterinary degree. 2. Not enough qualified applicants in the state.
- -Alaska's location / distance from lower 48 Alaska weather
- -do you mean offering positions that are similar to mine (which is really unique) or just having more people in public health with vet degrees? many vets in public health have add'l degrees and qualifications/skills so there is great variety in possible job opportunities depending on the other skills -Remote location, living expensive, lack of access to specialists, lack of CE opportunities in the state, lack of support for newcomers
- -The distance and difficulty maintaining family relationships for employees with family in the lower 48 has been a problem for us as employers. The environment is sometimes a problem. Low numbers of horses compared to other areas of the US is a problem recruiting quality veterinarians to work on horses.
- -My supervisor only believes in having one veterinary position, but the government also says no new positions. Retention problems due to lower salaries and benefit/retirement issues. The salary for the State of Alaska is dismal, not even as high as a Federal wildlife vet.

# How and why would a program at UAF provide or not provide qualified professionals for your organization?

#### Responses from Veterinary Employers

- -a qualified vet is the end result of the program and as such could be useful
- -A veterinary technician degree program at UAF would provide individuals with the goal of becoming a licensed technician with the opportunity to stay in Alaska while obtaining their degree.
- -alaska connection to the education process would expose more people to the state
- -Alaska provides a unique geographic opportunity for practicing veterinarians.
- -First off, my mission is to see some form of state support for young people wanting to attend veterniary school. Whether this is reinstating the old WICHE program (which worked fine, thank you) or creating this new one is awesome, by way of thinking. Since I have been "out" 25 years, reflecting on my first two years at CSU is archaic. (We did not have the "internet"). The combined anatomy/histiopathology/physiology class we had our freshman year could be augmented through internet access, I assume. (as much as it contributed to my ulcers, I can still honestly say I draw on that back ground daily). The only other course that comes to mind as being possibly "site" sensative would be the pharmacology. Once again, with the use of internet, probably very do able. I have been working toward offering an externship at our hospital for senior veternary students, I'd love to have an Alaskan participate! Having veterinarians who have come from the state of AK will definately increase the

- number of veterinarians who want to live here (versus looking for adventures-dragging reluctant spouses up).
- -I think such a program would draw more Alaska residents into veterinary medicine and I believe they would be better candidates for employment because they may be more inclined to stay in Alaska and be longer term employees.
- -More likely to attract AK students who plan to work in AK longterm or other students who are interested in working here and who would be exposed through their training to unique situations that arise in AK.
- -More students would pursue a degree if it were more available/affordable participants in the program would be familiar with the unique aspects faced by the Office of the State Veterinarian. This state is very different from every other state in the union. The participants would be familiar with livestock and domestic animals issues, as well as the importance that the states wildlife populations have in Alaska.
- -Presuming this survey's focus is on practicing veterinarians, I would assume that a percentage of those students would be from Alaska and wish to return to Alaska to practice. But, with Alaska's total population less than 1 M, the number of returning new graduates may quickly overwhelm the number of quality positions open.
- -Some of my Techs would consider becoming veterinarians if they could get most of their training in Alaska. A major concern for them is not being near their families during vet school 'outside' for four years. These kids would be staying in Alaska after graduation.
- -Their would potentially be a population of veterinarians to be hired however there would still be the issue of lack of experience straight out of school unless extensive externship programs were implemented.
- -We would be able to get more Veterinary Students in Alaska. ALL of our Veterinarians we hired were not originally from Alaska.
- -wouldn't make a difference
- -Professionals accustomed to Alaska tend to stay with us longer than new transplants to our state.

#### How did you overcome the obstacle of having to leave the state to attend veterinary school?

#### Responses from Clinical Veterinarians

- -I had to leave the state to attend veterinary school in Minnesota. I would have preferred to stay instate. I have just finally returned after a 12 year absence.
- -I had family in Wisconsin, & was able to gain residency by joining the air national guard... but it did delay things a little more than anticipated.
- -Biggest issue was cost. With the WICHE program it was surmountable. Had WICHE not been available at that time I'm not sure how I would have afforded to go.
- -Out-of-state tuition was very expensive. I overcame this by 1) pursuing my undergraduate degree instate to save money and 2) becoming a Washington state resident so I could pay in-state tuition for the last 3 years of vet school.
- -I left the state to attend veterinary school in Minnesota. Unfortunately this led to me being away from Alaska for 12 years. I have just recently returned
- -To the previous question No because I was under the WICHE program so I was able to retain my residenence, do to CSU on in state tuition, and had 50% forgiveness for remaining in the state. I graduated in 1985.
- -I was fortunate enough to get accepted to an out of state school without having to move to another state in order to be accepted as an alleged "in state" student. I was made sure I was well infromed of

the prerequisites needed as well as what Veterinary Colleges were looking for in students. I have found from talking to several students in Alaska that they are not only poorly advised as to how to apply to veterinary school, but not much initiative is taken by the student to aquire the needed information.

-I just really wanted to be a vet, so I went. It would have been nice to stay home.

What aspects of veterinary medicine in Alaska require or would benefit from additional training, beyond that provided in veterinary schools in the lower 48?

# **Responses from Clinical Veterinarians**

- -cold weather/dehydration/starvtion of horses is something i never saw anywhere but here. Sled dog medicine is a specialty, to a degree
- -Not much but there is virtually no discussion of the endurance canine athlete done where I went to school.
- -population health issues associated with sled dogs public health environmental health
- -Practicing veterinary medicine in rural areas where there are limited resources.
- -Since I do only equine veterinary medicine, I would say the severe cold creates aspects not usually dealt with in the lower 48.
- -We local and regional parasite and infectious disease issues. We also have a few unique species.
- -wildlife -fish/aquaculture -marine mammals
- -Wildlife (both avian and marine mammal) response training;
- -It's a hug state. I practiced in the Houston clinic because I married someone from out there. There is a hug number of rural animals that can't ever be addressed because the villages can not support vet care. The standard of care for animals has gone way downhill in the rural areas. My dad grew up there. It used to be if they weren't driving, they were shot. Now, it has gravitated to abuse. I wish there was something that could be done in terms of vet care, especially spay and neuter in the villages. In 1976, we rabies vaccinated as many as we could from Fort Yukon to Kalpeg. Reaching some of the native people is so difficult. My dad was born and raised along the Yukon, that is why they hired me. Having an in kind of helped. I just find it disheartening. There is also, back east, so many of the problems were heartworm and tickworm, but up here there are a whole set of issues that set us apart from the lower 48. If any doctor is to say that we don't need specialized training up here, I find it to be almost negligent. We definitely do.
- -Porcupine quill problems. Local plant ID and toxins. Raptor medicine/diagnostics. Local infectious disease prevalence/incidence.
- -Remote medicine, wildlife medicine raptors, marine mammals, etc. Sled dog medicine.

- -Wild animal encounters (eg, porcupines) and certain plant problems (cow parsnip, devils club, etc..) as well as Iditarod medicine.
- -Wildlife work (if student was interested in working with AK wildlife); sled dog/sports medicine
- -Perhaps some training on sled dog specific problems and management; also extra focus on endemic parasites and infectious diseases (this goes for any specific geographical region, lower 48, or AK). In AK in particular, "bush medicine" and the logistical/legal/ ethical ramifications of practicing in remote areas might also be discussed in vet school, or introduced in an externship/ medical rotation fashion.

# Responses from Non-Clinical Veterinarians – Key Informants

- -1, Wildlife-specific animal capture and handling techniques. 2. Research methodologies, including statistical techniques.
- -Absolutely have to have CE to renew. No specific AK issues
- -Epidemiology
- -Field based procedures Training biologists for basic sampling and animal monitoring
- -local epidemiology of diseases; infrastructure in Alaska (i.e., no counties)
- -shelter medicine courses volume spay/ neuter
- -There is a national need for wildlife veterinarians, UAF could provide this unique training for wildlife veterinarians specializing in marine mammals, terrestrial mammals and birds, as well as aquaculture.
- -Things like understanding influence of climate change on ecosystems and animal diseases.
- -Free range wildlife. It's hard to get at any vet school. UAF no longer has the WICCE program, so kids have to obtain residency elsewhere in order to graduate. I have been uniquely trained for my job, and would not possibly have my job without specific training. Alaska partnering with CSU will actually be a benefit to CSU because of our access to wildlife and wildlife training. Currently I can't put vet students in the field, even when they come to volunteer, because they are not residents of the state of Alaska. Something about insuring them. If UAF and CSU had a program, I could put those students in the field and give them the field experience they need.

#### What kind of training is required?

## **Responses from Clinical Veterinarians**

- -coursework in the above topics would be nice to see some sort of rural community rotation where students could see how animals interact with humans, what the risks are and what the needs are in these communities. Also would be a good experience to see how to practice quality medicine with limited resources.
- -Externships with North Slope Borough vet. General practice internships to allow new grads the confidence to practice in areas where there may not be much mentorship.
- -It would be desirable to have knowledge of caring for an injured or sick horse in the severe cold (dealing with the horse and with equipment, etc.).
- -specific Parasitology and Clinical Pathology. Reindeer medicine.
- -common disease, normal parameters, handling, etc
- -For rural AK practice one really needs to be trained and skilled in handling many species, small, large and wild and surgical/diagnostic skills need to be developed for working in areas where referral is not a practical or affordable choice.
- -Lecture Literature.
- -A short course

- -An externship/internship with an Alaskan veterinarian would show an array of Alaska type problems and how to deal with them.
- -Sports medicine and rehab for working with working dogs
- -See above; I think offering but not necessarily requiring a remote location externship (clinic or spay/ neuter program) would be a good idea. Also offering a limited number of volunteer positions working

at the start or the checkpoints of the Iditarod race might be instructive.

## Responses from Non-Clinical Veterinarians – Key Informants

- -1. Training modules (that qualify for continuing education credits). 2. Short,
- "mini-sabbaticals" at other facilities.
- -Foreign animal diseases
- -CE for veterinarians Hands-on workshops for veterinarians, vet techs, and ------biologists
- -frequency of international movement of animals
- -see above
- -noted above
- -Principles of ecology and epidemiology of animal diseases would be helpful.

# <u>Identify areas of training that might be required in Alaska and suggest ways that it can be provided.</u>

# **Responses from Allied Professionals**

- -Field conditions require that vets be able to pack light, be physically capable, be trained in aviation, cold weather, and bear safety.
- -Providing veterinary care in remote "bush" villages requires experience in working in less than optimal surgical conditions with few experienced/trained staff. A veterinarian visiting our remote villages would have to be espesially self sufficient
- -Surgical ways to attach devices to birds. Dan also involved with imobilization protocals with Walrus and monitorring the health and response to the manipulations. We alse deal with Avian Influenza virus monitoring.
- -The only way people can be trained to meet our needs is through a hands on mentorship prgram. We need people with the basic training that can go to the field and learn the specific procedures via hands on training. Then they can pass those skill along in the future.
- -Veterinarians for wildlife research need to be trained in diagnostics of wildlife diseases and particularly in light of ecological conditions that promote such diseases. They also need to be able to work under field conditions in remote areas as opposed to clinical conditions.

Explain your level of agreement with the following statement: "Providing at least two years of veterinary school education in Alaska will improve veterinary care in the state."

# Responses from Clinical Veterinarians

- -Alaskan students receiving schooling here might be more likely to come back to Alaska after finishing vet school to practice
- -At our clinic in Homer over the past 10 years we have had local high school students that have gone on to vet school outside and now have 2 more students that are in pre vet courses outside who I know would benefit greatly from taking many of the prevet/vet courses in AK. We also have a technician here who has been accepted to veterinary school but is a young mother and moving outside with whole family is limiting her ability practically and financially to go to vet school.

- -having students in Alaska is more likely to have them return after graduation.
- -I am concerned as a veterinarian and a tax payer, that UAF will not be able to compete with other veterinarian schools in drawing the same quality of professionals here to teach as would Michigan State or Colorado State, etc. I believe we do have enought veterinarians the problem is the community will not support the necessary pricing on veterinary services as the lower 48. As you know, military etc, have an increase of living expense of approximately 25% above lower 48 salaries. The veterinary pricing is approximately 5-10% less than that found in the lower 48 making the amount we can offer incoming new staff less than they could find in the lower 48. The problem isn't we can't find veterinarians the problem is the average invoice from Fairbanks veterinarians has not kept up with the national standards of veterinary practice. The thought of developing a school here in Fairbanks that would solve this problem is ridiculous. I believe those students would have difficulties passing the last two years at Colorado State unless their professors are willing to do training here to prepare those individuals. I do not believe the students will have any smaller debt coming out of school than those already graduating from the top vet schools in the nation. On top of the expense of qualifies professors with experience in teaching at veterinary schools, is the expense of college classrooms etc, that will be of the same standards of other veterinary learning centers. Part of the first two years is not only learning but having the availability of a large veterinary school to mingle in and observe cases. If UAF had a program I will oppose any competition with the private sector in seeking veterinary caseload from our area, especially if it is done at a reduced cost. UAF will put some veterinarians out of business and possibly take away any need for new graduate work in the area if this is the intention of this program. We already have more veterinarians per capita in our area than almost anyother state in the union. I would love to have an extra person working here but I cannot offer them the wage found in Washington or the other west coast states. With our cost of living truly more than what is incurred on the west coast this puts a financial burden on any new veterinarians coming into the state. We have excellent veterinary care currently found in this state, the community is at the impression that it should be low cost. The problem isn't finding qualified veterinarians it is increasing our fees to cover the cost of educating those individuals so they can make a living here in Alaska. I would not consider hiring a veterinarian from Alaska because I do not believe we have the resources here to provide the same quality of education as the current veterinary programs offered else where. The problem isn't we cannot find veterinarians the problem is we cannot afford to compete with the lower 48 for the salary they need to cover their school debt.
- -I do not feel we can provide any additional quality education here at a reasonable expense than is currently provided in the lower 48.
- -I do not see a correlation of being schooled in the state of Alaska and an improvement of "veterinary care" in the state.
- -I don't know how the two would correlate.
- -I don't think aspects of practicing medicie is any different than the lower 48, but getting DVMs to Alaska, and getting them to stay, is difficult.
- -I think if I had had the opportunity to do 2 years of my veterinary training in Alaska I would have been more likely to return immediately after graduating veterinary school.
- -I think that including Alaska in the WICHE program would be more cost effective.
- -If the students come back after they graduate
- -In my opinion, the major population areas of Alaska have a level of veterinary care available above average compared to the same population mix in the Lower 48. Any perceived lack of care is primarily in the outlying districts and villages. This is unlikely to be corrected by a program offering 2 yrs of basic vet med studies.
- -It may encourage more students from rural Alaskan communities to attend vet school. These students would be more likely to return to practice outside of Anchorage or Fairbanks.

-It would allow more interested residents to pursue a career in veterinary medicine, & should increase the amount of veterinarians willing to practice in Alaska (they already know about our weather & other local quirks). May provide more interested in serving rural areas as well.

It would offer more residents the option of a potential DVM pathway and I believe this would bring more DVM's back to Alaska once they graduated.

- -more apt to have veterinarians return to AK to practice
- -Our clinic has had several veterinarians come and go who thought Alaska would be a good place to live yet changed their minds after a winter here. Perhaps training some Alaskans might improve retention of veterinarians in the state?
- -Outstanding vet care is and can be provided in the state regardless of your education location. Small animal work is routine nation wide with small area variances. Large animal medicine is very basic in this state
- -The first 2 years of formal veterinary training are traditionally devoted to anatomy and physiology (year one) and pathology/pathophysiology (year two). Such courses can be taught at established veterinary schools. What would be different about such course offerings at a school in Alaska? Furthermore, if there is an interst on the part of the student in pursuing a career in wildlife biology and related medical studies, there are advanced studies (i.e. internships, residencies and masters/PhD programs) that can be pursued. I don't see the benefit of specific studies pertaining to Alaskan animals as part of the basics being established during the first 2 years of veterinary school.
- -Travelling to Fairbanks and then to CSU for veterinary education is equivalent to students doing all four years out of state. Though, getting at in-state tuition may make it more beneficial for some students. Due to the rising costs of veterinary medical education, I think the state would see more benefit to rural areas (where the needs are) by sponsoring/subsidizing veterinary care in underserved areas such as they do for teachers, dentists and medical doctors. The more-populated areas of AK are well-served by veterinarians who educate their clients daily about the value and the costs of providing expert veterinary care. As an Alaskan student that was able to go to WSU via the WICHE program, I am very thankful for being able to have been a participant in this program which allowed be to save much money. Though had I not been able to do that, I likely would've changed my state residency and applied to veterinary school that way or I also know many students who simply paid out-of-state tuition if they still really wanted a veterinary education. It is debatable in our profession, that taking on student loan debts above \$150,000 may not be a wise approach considering the salaries that we make as associate veterinarians...but some are choosing this route. I would say that a program similar to the WICHE program definitely still has it's place for a few students per year without setting up a whole new program. The education I received at WSU was great and has served me well since I graduated and came back to AK in 1996. In conclusion, I think a smaller scale education program combined with some incentives to practice in rural areas should be looked at.
- -Veterinary care in the bush communities would likely improve.
- -We need to facilitate qualified Alaska residents gaining entry into veterinary school, train them to practice medicine that will be practical and beneficial to the state (both to private animal owners and public health) and then retain them for practice (whether clinical, research or regulatory). Which 2 years? Students would need to travel to the lower 48 to gain relevant exposure to large animal medicine and surgery. They'd still need to graduate from a lower 48 vet school, so we're sort of back where we started.
- -Which two years will make a difference.
- -While I applaud the two year approach I believe the most essential aspect is that our Alaskan youth have an opportunity to attend veterinary schools at a in-state tuition level. Either would be great but one MUST happen. It is an embarrassment to the state of Alaska that the WICHE aspect of veterinary medicine has been discontinued. Good heavens! WY and MT have been able to keep it up! It has

hampered our student residents due to cost and it has hampered myself as a clinic owner in hiring. For all the palaver of the internet, most people appear to be intimidated by our distance. (Yes, we are part of the contiguous USA). The previous WICHE program and the retention clause in place in the 80's allowed me (born in Bethel) to attend veterinary school and within 5 year start my own practice. Two years ago I built a 7000 sq foot new facility and currently employee over 30 people. I do not believe this would have been possible if I had left CSU with the debt load out of state residency would have placed on me.

- -A lot of vets from the lower 48 don't have a clue as to what is required in the villages, just to get along with the people, let alone how to help with the animals. I know that the village issue is not only a vet issue, but political as well. But it is really a public health issue. And it should be addressed as such.
- -The first two years of vet school are pretty much standard. The basics of scientific introduction. Doing it AK wouldn't improve much.
- -Even though the first 2 years here would provide adequate scientific didactic training, the student would lose the benefit of 40 to 50 different professors and their years of experience. There is a great deal of academic benefit from sitting around and having coffee with some grey-haired old professor that has been teaching and practicing for years and years. From a scientific standpoint, there would be little difference in their education, but from a networking and life-experiencing point of view, the students would suffer from such a program.
- -It will encourage more people to go into the proession and help with shortage, and help to specialize the graduates for Alaska although less so if early in the degree (ie, first 2 years in the state).
- -There are a few things here unique to Alaska, but not enough to warrant a school.

# Responses from Clinical Veterinarians – Key Informants

- -a vet is a vet, if people want to live here they will, having a school here would not impact the number of vets in the state
- -I don't think you need to have vet education in the state to improve quality of care but I do think it would help to increase/recruit the number of veterinarians in/to the state.
- -If it helps us expand the pool of people who will want to work as veterinarians in AK then I believe it will help us improve veterinary care.
- -I am not at all sure I can evaluate the level of veterinary care in the state of AK. All that I am sure of is that the North Slope, in particular, lacks adequate veterinary care at this point in time. I am not sure about the rest of the state.
- -Clinical vet care in the state is fine as it is.
- Allowing motivated Alaska students to get their veterinary education in-state will most likely result in more of them electing to practice in Alaska, making it easier for Alaskan practices to fill openings for veterinarians.

Explain your level of agreement with "Veterinarians having had at least two years of veterinary school education in Alaska will help increase the number of veterinary professionals working in the state."

#### Responses from Non-Clinical Veterinarians – Key Informants

-Given that the first two years of veterinary medical schools are very similar because of their need to attain acceditation, I doubt that much that is uniquely Alaskan can be introduced.

- -Not that much difference in clinical practice
- -Agriculture is unique in Alaska. There are many types of alternative livestock. Have to cross via land another country to enter Alaska.
- -It would help enhance the professional veterinary infrastructure that provide veterinarians with the support they need (referral specialists, consultations, CE, non-medical aspects of veterinary practice-workplace needs as well as human resource needs). Additional, increasing the veterinary infrastructure in the state would help raise the bar in the level of care in particular in the area of wildlife medicine and wildlife research involving acquiring biological samples. This would make Alaska more attractive.
- -they would theoretically understand how Alaska is structured and local disease risks; non-Alaskan students would also be able to acquire this knowledge relatively easily
- -If they have been here for two years they may recognize some of the benefits of living in AK. Alaska is the only US holding in the Arctic. Wildlife issues are of paramount importance. Alaska will likely be most affected by climate warming. The expanse of the state, the small human and domestic livestock populations. Largest harvest of marine fishes in the US Growing shellfish aquaculture, increased development of marine finfish hatcheries . Subsistence harvest of game, fish and marine mammals. Growing development of the free ranging reindeer herds. Expansion of beef cattle grazing operations on the grasslands of the Aleutian Islands
- -Alaska specific issues are unique. Alaska students in a veterinary program will be much better qualified to practice or work in Alaska.
- -The problems we have encountered have not been related specifically to veterinary medicine as much as to lifestyle and family.
- -It depends on what their ultimate career goals are. Private practice veterinarians will be employable and will likely remain in Alaska. There are, however, limited full-time positions in Alaska for those interested in public health, wildlife, research, etc. Those students may look elsewhere for gainful employment, unless personal factors keep them in Alaska.
- -There are constantly positions open in Fairbanks, at least at dog/cat clinics. But we really need large animal practitioners. They are also needed in South Central and in the Anchorage area. We don't even have large animal capacity here in Anchorage. Although a practitioner couldn't rely only on large animal, would need to do mixed in order to survive. There is only 1 part-time equine veterinarian in Fairbanks.

Explain your level of agreement with "Veterinarians having had at least two years of veterinary school education in Alaska will have a better understanding of Alaska-specific issues."

- -I do not think there are a lot of differences at the prevet level that are Alaska-specific. If a vet student wants to specialize in, say, wildlife, perhaps he/she may benefit from Alaska-specific info on the species in the state or subsistence, but this is much farther down the educational road than undergraduate curriculum.
- -is this the same as the previous question?
- -It seems to reason you are always more aware of your local area
- -Likely, however it depends on how much time there is for integration of Alaska issues. Traditionally, the first two years of the professional vet program are overwhelmed with the standard classes (anatomy, physiology, micro, etc). I don't recall having much time at all to gain an appreciation for issues outside of the daily grind of that curriculum. Unless there is a real effort to incorporate Alaska-

specific issues into the curriculum up front, it seems the best opportunity for developing an understanding of issues in last two years; through clinical externships.

- -Living here for 2 years would allow people to know if it was right for them or not. Alaska residents would have more options.
- -repeat question
- -Unique agriculture and bush communities
- -We have very unique disease issues. We also do not have many diseases in common with the lower 48. UAF would definitely need to offer a remote rotation.

## At what point did you decide to move to Alaska?

# Responses from Clinical Veterinarians – Key Informants

- -before
- -8 years after vet school
- -After a trip when I was a teen.
- -I did not move here. I do contract work with the North Slope Borough in Barrow, AK, and I work at the clinic here discontinuously. I have volunteered as a checkpoint/ trail veterinarian for the Iditarod race almost yearly since 2005.
- -Came up in the military
- After veterinary school.

# Responses from Non-Clinical Veterinarians – Key Informants

- -1 year out of school
- -after
- -After
- -After came up in the army
- -After school
- -After vet school.
- -after veterinary school
- -Before vet school.
- -Before.
- -During vet school.
- -worked in Alaska before vet school, moved here permanently
- -after.
- -after

# What attracted you to Alaska?

- -graduate school
- -My husband:)
- -The outdoor environment.
- -I like the contrasts of life here as compared to my life in WA; also, I enjoy unique challenges of bush medicine, and I am curious about the land, wildlife, and people of AK.

- -Didn't have a choice, but liked it and stayed
- -I got an interview here.

# Responses from Non-Clinical Veterinarians – Key Informants

- -desire to see the state, developing frontier, wilderness, wildlife
- -Grew up here and at that time Alaska forgave a percentage of student loan money for returning students.
- -I moved to Alaaska as a military assignment.
- -job
- -Liked it and stayed
- -Outdoor and wildlife opportunities
- -outdoor life cooler climate
- -Previous experience (non-veterinary) working in Alaska.
- -Secured an employment opportunity which was consistent with my professional goals. To live in a place different from where I grew up. The adventure of a new and beautiful place.
- -The specific job I have
- -Was stationed in the Army and always wanted to spend some time in Alaska
- -Marine mammals and wildlife opportunities that did not exist elsewhere.

Thinking about your classmates in veterinary school, how many graduates would consider moving to Alaska to practice?

# Responses from Clinical Veterinarians – Key Informants

- -very few
- -I think many would like to visit here but most would not want to live here (too far from family, long winters, etc..)
- -Only a few are interested--AK seems like such a long way away. That's why "homegrown" students would be important to cultivate.
- -My classmates were, as a whole, more attracted to the type of progressive medicine found in larger metropolitan areas. There were a few, however, who would probably have considered the small-town atmosphere of much of AK (beyond Anch). This inevitably impacts the level of medicine you will practice, in my opinion, and sometimes it becomes a choice of lifestyle as well as career.
- -Probably not too many
- -Only a few.

- -a few
- -few
- -Few
- -From my experience I see an increasing interest in coming to the state. I have received and increasing number of inquiries from veterinarians every year begining in 2003 when I started in my current position.
- -I think moving to Alaska to practice would be quite appealing.
- -I think some would, but the climate (year round) and distance from families is a drawback.

- -Only a few.
- -Probably more than you would think, but having talked to some of his associates, they say it is difficult to hire somebody that wants to come up. A lot related to expense. They are broke. It costs a bit of money to come up here. A lot won't come upunless you pay their way up. then if they decide to leave you have to pay their way back. I wouldn't do that. I don't have any problems finding vets to work in my office.
- -Probably very few. I don't think anyone I knew in school would have come here to practice. Some might have considered coming to do wildlife work, but likely on a temporary basis. Most of the WICHE students went back to their origin-State, while local residents tended to stay in that area. Unless they came from here, I do not think any would consider a job here
- -Yes. In fact, from my class of 72, five moved to Alaska.
- -Judging from my memory of 20 years ago, many would have thought it to be cool.

# What, if anything, have students said about locations of veterinary schools as a consideration in whether to enter the profession?

#### Responses from Clinical Veterinarians – Key Informants

- -makes no difference
- -Actually most don't care about the location as much as cost of the school and which one they can get into.
- -I haven't heard anything specific.
- -Most prefer to stay in their home states, if not for financial reasons, then for familiarity of the environment, and for the chance to see a representative example of the case-load they would expect -to see, if they practice locally.
- -Not much different than many other medical degrees. We don't have a med school, a dental school, etc. We only have a nursing school. So it's not that big of a deal. Kids know they have to leave to get the education they want.
- -The cost of out of state tuition is universally the primary concern.

- -cost is the biggest issue; nothing specific about location
- -Going out of state is a big financial burden
- -Many students do not want to leave Alaska for studies (including my own children) as well as additional costs.
- -May have to travel to attend Vet school. Also Vet school is very expensive.
- -Most students are considered first with gaining entrance to a program. It depends on the age of the student as to how flexible they are to relocating. Usually once they have made their decision to pursue vet school, they are flexible as to where they go.
- -Nothing. They are more concerned about getting into ANY vet school. Location generally does not matter.
- -Pre-vet students approach me because they are interested in wildlife work in Alaska and elsewhere.
- -They seem to be under the impression that veterinary schools differ greatly in which one will give them the best background in wildlife veterinary medicine. They are disappointed when I point out to them that there is very little difference in the coverage of wildlife between veterinary medical schools. I tell them that, before they can be a "wildlife veterinarian", they need to become a

- "veterinarian". Specialization in wildlife is best left for residencies, or, better yet, to graduate study. Probably two over the past few years in my office that went on to vet school. No.
- -Prospective students in Alaska are discouraged about competing for admission to other state schools.
- -Students are looking for a unique experience and see the state as providing a great opportunity.
- -Typically the options are limited because of residency requirements and the competitiveness of applying. Assuming they could afford it, I think that most would go wherever they got in. If they actually had a choice, I think that they would go where it is least expensive which is typically the state in which they have residency.
- -It is usually me telling them where the schools are. High school student don't realize that they can't go here. Moving is a big issue for some of these 'home-grown' kids. Many kids have strong ties to this state, moving out of state is not an option.

# How would a UAF program affect veterinary care and veterinary medicine as a profession in Alaska?

# Responses from Clinical Veterinarians – Key Informants

- -negligable on both
- -I think it would expose many more students to Alaska. Hopefully they would like to stay here after school and that would offer more veterinary care to the state.
- -More veterinary students= more qualified vets that want to stay and practice in AK= more choices for owners
- -I don't know, but exposing students to the far north might entice them to stay!
- -Wouldn't affect it much.
- Positively. Motivated in state students would be more likely to pursue veterinary medecine as a career, and the presence of a teaching facility would likely increase local practitioners' standard of care.

- -A program at UAF would provide a unique experience for graduates and help attract more practitioners to the state.
- -could result in less vacant positions; would be good to know why there are vacant positions and if someone more economically-thinking could assess what the market would bear
- -Currently, I think good veterinarians with an interest in Alaska come here and contribute to the profession. I don't think a vet med program in Alaska will necessarily enhance private practice, but it could enhance the non-clinical veterinary field if there is room for incorporating the issues; and there are jobs for students to return to after their two years outside.
- -I believe it could elevate the standard of care. There could be a downside to general practice if there was a clinic associated with the school that competed with local practices.
- -I think most of the undergrads I have dealt with in a classroom situation (upper level undergrad) were not from Alaska in the first place, so I am not sure they would come back to the state to practice. I am concerned that with the quality of science training the Alaskan-schooled students have received at their local high schools (esp. the rural schools), they may not excel in a pre-vet program and gain admission to a veterinary school. Some of the most basic tenets of science had not been taught to these students.

- -I think that it would enhance it
- -It might enhance veterinary care in bush Alaska.
- -My speculation that it wouldn't affect it one way or another.
- -provide more veterinarians to practice in the state
- -Very little. It might make getting continuing education easier.
- -Yes, provide more Veterinarians but they still may not locate in the smaller communities due to limited revenue. It would be good to have more Vet research in the state associated with the school.
- -Where would the instructors come from?
- -It would really improve our status with the general public. We often-times look down out out-of-towners. This would bring credibility to our profession.

#### Job prospect in Alaska for newly graduated veterinarians?

## Responses from Clinical Veterinarians – Key Informants

- -The way vet medicine is now being taught I see the future as being quite grim. Many practices are putting the cost of vet care out of reach of alot of people because of the insistence on running so many lab tests and a lack of common sense in treating cases.
- -The larger clinics (like VCA) seem to always have openings but the smaller more established clinics only have the occasional availability. As the population/economy increases, job availability should increase too.
- -I think they're good--we're a bit isolated from the major economic downturn.
- -I am not experienced enough to say. Obviously the largest number of veterinarians would be absorbed by the greater Anchorage area. I don't know what the current job prospects are in Anchorage; it seems saturated enough. There are, however, many rural locations that could absorb a small handful of vets. New graduates would have a hard time in remote areas, at least at first. But, getting them out into the job pool is a good first step into expanding veterinary care state-wide.
- -Not bad jobs are there if you look.
- Depending on the number of graduates- as good as anywhere else. In other words- if the number of new graduates as a proportion of existing practitioners is similar to other states, the prospects should be as good as anywhere else. If there are too many graduates, and not enough openings, they'd be forced to take jobs out of state

- -Excellent for clinical vets- though the pay differential is non-existent from lower 48 jobs, so the vets that come here have got to want to be here for reasons other than pay. I do not think this is changing any time soon, so suspect it will be the same in the future. good
- -I am not aware of a shortage of clinical private-practice veterinarians in the state. It is hard to judge job prospects, since it is likely that currently clinical vets only come into the state once they have secured employement. In other words, it may be more difficult to place a class (depending on the size) of newly graduated veterinarians in Alaska. I do feel strongly, however, that the opportunities are limited in Alaska for non-clinical work. Although we have seasonal field work in wildlife, many times this is being accomplished with "visiting" (voluntary) veterinarians. As far as full-time, gainful employment in public health, there are few positions and turnover is minimal. Research and academics attracts certain students, however I am uncertain as to how many jobs are truly available in the

UAF/UAA system. It is my guess that prospects are better outside of Alaska with such employers as the pharmaceutical industry, federal government, and numerous universities.

- -I am not that familiar with the typically practice but all the private practice veterinarians I know sound very busy and that there is room for more vets, especially ones that could be set up in mobile practices that could travel to remote communities. Also, I know that it can be challenging getting vets here to support field projects.
- -If you look for a job, you are going to find one.
- -Job prospects are not great because of the population base. I do think there are needs in remote areas that are not met. I do think it is better for local practices to hire Alaskans that understand and embrace living here.
- -Limited
- -Not really sure.
- -seems like there are job listings
- -Somewhat limited.
- -there is a growing demand for practitioners interested in providing care for livestock. As the population of the state increases there is an increase in the number of domestic pets.
- -Good. I can't really provide numbers. It would be good for clinical practitioners for sure.

#### Responses from Veterinary Employers

- -At least on the North Slope, we have had a difficult time hiring a Veterinarian to run the Vet Clinic for the NSB.
- -Excellent
- -good
- -Good
- -Good
- -good
- -Great
- -I think there is a good opportunity for all qualified, licensed technicians with good work records, both now and in the future. The economic issues in other parts of the country do not seem to have yet made their way to Alaska's veterinary community
- -I think there will be few opportunities available, we have a fairly stable population so the number of vets needed is likely to stay about the same; this creates a situation where the only job openings come from vets retiring or moving.
- -If you look for a job, you'll find one.
- -I've been in practice in Alaska since 1969 and have noted this economic factor: when the economy is better in AK than the L48, there are plenty of applicants; when the L48 is doing better than AK there is a dearth of applicants. What the future holds is anyone's guess. I have mentored and recommended over 15 "Alaskans", none of them natives, who have attained DVM degrees; about 50% of them did not return to practice in Alaska.
- -The growing domestic pet and livestock populations will demand more veterinary practitioners. There is a desperate need for livestock veterinarians in the state.
- -There does not seem to be a great shortage of veterinarians in Alaska (at least in the SC area) so job prospects are reasonable but not great. Some of us will be retiring in the next 10 years or so and there will be a need for people interested in practice ownership and longterm commitment to Alaska as that occurs to a number of practices in Alaska.
- -There is a limited market but there is room. I graduated from CSU with about 120 classmates each year. This did create a "glut" of veterinarians trying to stay in the Colorado Front Range area. As a

result the salaries were low compared to other areas. This could easily result here if the graduating classes were large.

- -Very high prospects, Alaska is always looking for Veterinarians.
- -It depends. Comparable to lower 48, I guess. Most of the areas in the state that have enough population to require a vet are already served. There isn't much of a gap. A new school would saturate the state in very short order.
- -Job prospects are good for new grads. We have hired seven new grads over the last ten years.

#### Additional comments related to veterinary education in Alaska

# Responses from Clinical Veterinarians.

- -2 years here would be much cheaper for students. Students could mentor under local veterinarians.
- -A program to train veterinary technicians is more needed than a program for undergraduate vet med -currently, it is very difficult for Alaska residents to get into veterinary school since they are considered out-of-state residents (that cohort is usually very small and competitive) -good idea
- -I believe that there is a general shortage of veterinarians across the country. It is very difficult to recruit veterinarians to move to Alaska to work. Many people choose to move away after a few years here if they have not lived here before. It is very difficult to get accepted into veterinary school as an out of state resident. Providing a veterinary program in Alaska would increase the number of Alaskans who become veterinarians. These students would be much more likely to practice veterinary medicine in the state.
- -I don't think it is difficult to go outside for school, but it would be nice for residents to avoid out-of-state tuition and it may draw more people to Alaska.
- -I guess I don't see the need for a full-fledged veterinary program in this state, but students could certainly benefit from WICHE (last I ckecked, it had been discontinued).
- -I think that the proposed program is a realistic option for AK veterinary education and that animal health care issues are possibly going to expand within the state as population of humans continues to grow and also as climate change may allow for development of "foreign" diseases" this far north as has happened over the past 15 years in northern europe. I also see a lot of great potential candidates here who if given the opportunity to study some of the program in AK would be a practical and financially viable route for them.
- -I think the option to attend veterinary school in AK may increase interest in the profession.
- -I think this is would give alaska residents an excellent opportunity to pursue a degree in vet med and would probably increase retention of vets in the state, esp. in more rural communities. My primary concern for this program is that I feel having a classes of students and numerous instructors around during the first 2 years was so vital in my learning; attending rounds with 3rd and 4th year students, visiting the school vet hospital and observing procedures, and having such a wide range of specialist around allowing exposure to the many opportunities for granduates. I don't think having a small class in a "non-vet hospital school" can provide these experiences.
- -I think we desperately need a veterinary technician program here and it would be supported by local residents. It should be to at least earn a veterinary technician degree. Supposedly 3 schools were thinking of implementing it, UAF, Mat Su of UAA, and career academy. I am not sure where it stands currently. I do not think a veterinary program for earning the degree of DVM will be financially feasible in Alaska. I don't think there is a big enough population to draw quality applicants and due to cost of living and out of state tuition I do not think we will appeal to out of state students unless they are desperate to get into a DVM program.

- -I think with the problems this state is having with budgetary deficits already this is not a feasible or reasonable endeavor on the states behalf. I also believe that UAF be held to the same standards as the top schools in the country. I do not believe that with the classroom and facility at UAF this can happen.
- -If a veterinary school is to be an excellent school, it will require stellar faculty with a commitment to superior education and stellar students with a commitment to learning. A quality veterinary program costs a great deal of money. What is the cost-benefit ratio of having even a partial program in Alaska? Is the goal of establishing such a program to get individuals to return to Alaska to practice veterinary medicine upon completion of their formal studies? If the goal is to get folks to return, setting up such a school is not the answer in my opinion because there is no assurance that such individuals will remain in Alaska even after they earn their degrees. Attract folks to return to Alaska by providing incentives to potential employers and by encouraging potential employers to pay top dollar for new hires. There are ways to provide education without costing tax payers more money.
- -Is it only for Alaskans ?? When I was a student, there were other students that would go to any length to get in vet school (like going to Italy, St. Kitts, or Mexico). When they got their degree, they would go home to practice. If the idea is to retain graduates in Alaska, I would place the school in Anchorage rather than Fairbanks. Anchorage has a milder climate, more vets that might be available to teach and more night life.
- -It has been very frustrating over my 5 1/2 years of practice here to watch student after student leave the state to gain residency elsewhere b/c they had been denied admission. Most of these students are well qualified and simply have the disadvantage of applying as out of state applicants. If they do get in as an out of state resident, odds are they will be graduating with greater than \$100,000 in student loans. It also seems that we go through phases where there is a deficit in the number of practicing veterinarians; this may be a normal fluctuation but I do not see the same patterns in other locations (as described by friends in practice around the lower 48). I also see a need to increase the number of veterinarians in public health practice over the next few years.
- -Need more licensed veterinary techs
- -no
- -Pretty much spilled my beans on the previous one. :) I STRONGLY support efforts to allow our students attend veternary school at resident rates/support. I work with both HS here in Eagle River with their mentorship programs as well as offering a volunteer program to younger kids and think it is very embarrassing to our state to have to tell these kids they have to "pretend" they are residents from another state to follow their dreams.
- -The burden of educational loans for veterinarians is becoming mind boggling, so a program that is partially local could cut the costs dramatically for housing and travel and make the education more affordable.
- -The costs of a veterinary education are overwhelming to many qualified people. If some of the relocation costs and out of state tuition were less there may be more people joining the field.
- -The need for DVMs, espically in the more rural areas is a true concern. Currently it is very hard to replace owners who move into retirement with individuals desiring to buy the practices. I believe having a resident pool of DVM graduates could help offset some of these needs.
- this would allow more veterinarians that are knowledgable about Alaska to take the jobs that need to be filled in the state
- -UAF apparently has the staffing available to provide a 2 yr vet program and there is definate appeal to embarking on this endeavor. However, the long term goals need to be closely examined; what exactly are the needs and expectations? If the goal is to provide vet care to rural Alaskans, the venture is suspect. If it is to provide a first step toward a DVM degree for all applicants, then it may turn out successful since most applicants will not return to Alaska to practice. One of the issues I face as an

issues, but it's hard to come by.

owner/manager is that many people regard living in the Last Frontier more appalling than appealing. In my early years in practice in Fairbanks I would receive numerous unsolicited applications from new graduates. This dwindled and disappeared as the economy in the L48 surged and graduates could find jobs there that paid more than salaries in AK; an economic factor we have lost sight of until the last couple years. This is an interesting survey but it just scratches the surface of the issues involved.

-You have to know how to work with culture groups – how to approach them. One vet could travel to a variety of places. We also have a huge population of wildlife that interacts with people. Need some sort of wildlife emergency care training. It's hard to get that kind of information. People up here are prone to having encounters with wildlife. I wish I had some sort of training in emergency wildlife

- -There are cities in the Lower 48 with populations higher than our entire state. I would really question the numbers you would need to justify a school.
- -Veterinary schools, historically, are the ones within a university that pay their own way. More tax payer dollars go to other programs in a university. That said, most of the expenses, above and beyond that which are covered by tuition, and those for which taxpayer dollars are used, are done so in the second two years of schooling. So this would not be a benefit to Alaska in any way I'm personally pretty much tapped out in paying taxes, so I don't see a benefit to the general public from initiating such a program.
- -I don't think that it is a good idea. The first two years, you are building a base. If I was looking at it, I would look at an internship in the final two years. You get them in the first two years, you cover too many basics. If you get them in the last two years, you assume the basics are there. I would look at it as an advantage if you could offer education later in the process. For example, Classical Trichinosis. In the Lower 48, you just freeze it. Up here, it is immune to freezing. But if you try to teach that in the first two years of school, you first have to go back and thoroughly explain Trichinosis. It would be futile.
- -I would be good for Alaska in general, even though Alaska-specific training is not really needed.
  -Vet schools in the lower 48 are already struggling w/ funding I wonder how the state would deal with that.

# Responses from Clinical Veterinarians – Key Informants

- -I am intrigued with the idea of a veterinary program at UAF. I think it would be good for AK and for Alaskans who aspire to the profession.
- -The state has done a poor job of supporting local students, so I think that the main benefit isn't so much that AK needs more vets. I think they are reasonably willing to come here. I don't have a problem getting them here when I need veterinarians. But for students, being in AK is definitely a barrier. A few positions are held at some colleges, but there is no help for the students, like when WICHE was around. That would be the main thing, to provide access for our students. The bigger thing that AK needs is a tech program. I know they have the one going in Mat-Su, but if only licensed techs are allowed to do licensed tech stuff, then we have a problem. There is a shortage nationally, and a great shortage here in Alaska.
- I would like more details about curriculum specifics, numbers of students, staffing, etc. in order to form a more informed opinion. I would want to be absolutely certain that students leaving Alaska after two years would be on an equal footing as the classmates they would be joining, before I could endorse the program.

- -I certainly saw a need for the program- students were interested at UAF, but at the time did not have the capacity even to really effectively counsel pre-vet students. I am skeptical about these students returning to state to practice. If this is a motivational factor for planning, I would be cautious and perhaps consider polling students. Could it be a requirement of the program?
- -I only hire people to do relief work, when I will be out of the office.
- -I think the idea of veterinary education tailored to Alaska is a good one, but as a non-clinical veterinarian, I am truly concerned about the limited employment opportunities. It seems that a directed Vet residency program here in Alaska would be a way to seek out students that have an interest in Alaskan issues (wildlife, public health, etc). They would be further along in their education to apply their knowledge to specific issues. I'm not sure it really matters where students do their first two years of vet school. And there is always the risk that they will not return to Alaska. Instead, seeking out undergraduates, providing meaningful summer employment here that continues through vet school, with a commitment for a residency...this would serve to bring those truly interested to the state. This would be similar to the former WICHE program, I believe, but with more structure. It would be interesting to see how many students that went through the original WICHE program eventually left the state, considering Alaska had no return requirements, to my knowledge.
- -Interesting initiative!
- -There is a shortage of veterinarians in the United States in general. I do not believe there is a shortage here in Alaska at this time.
- -what are the approximate costs and resource needs (teachers)? would tuition be in line with current UAF rates or require something new?
- -Will it coincide with the Tech program?
- -Especially in rural areas, my biologists are constantly getting asked to perform routine veterinary care, including anesthetizing. There are virtually no veterinarians off the road system. We are a small state, so personal issues always play a role in where veterinarians will locate. If UAF does proceed, the state would probably set up a rotation. I am overwhelmed with requests for externships from around the US it would be nice to have the rotation, a more formal program set up. Although I am supportive of the idea in general, the Department of Fish & Game only absorbs 1 vet every 5-10 years, so don't expect many new hires.

#### Responses from Veterinary Employers

- -A four year school would be good. I have not noticed any vet schools closing over the past 40 years. Two years is better than none.
- -coordinating with another school for clinical education is an excellent idea and worked well for the Washington State University/Oregon State University program that was in existence during my time in veterinary school.
- -Costly to establish a school. In my opinion, starting a vet school at UAF would be a huge bight. Way too costly and then they would add the cost of accredication. No special training is needed in this state for clinical practice. There may be a few differences in need, but very few, and the training can be handled after the people are hired. I would never hire another individual right out of school anyway. I've had much better luck with trained individuals. New grads have such high debt now that they can't afford to work for starting salary.
- -Exactly what is this program supposed to accomplish? Who is jerking the chain on this idea? Where will the students get their pre vet requirements met? How many students do you need to make the program viable? Will it attract students from L48? It sounds promising but so did the Delta Farm Project and the Healy Coal Fired Electrical Plant...

- -good idea
- -I believe that UAF currently has the faculty that can offer the core curriculum classes as well as provide the introduction to wildlife biology.
- -I do feel that making sure the program is one with a expectation to graduate in 4 years is important rather than stringing out the first two years of courses.
- -I think it is a great idea as long as the next 2 years are locked in, without that it is just another prevet program. My big question is how many slots is CSU willing to give to the program, I would really be surprised if it is more than 2 a year and then you have to look at the cost of the program for 2 students a year unless you can have a substantial number of other health care students in the program as well.
- -I think it would be exciting to offer the opportunity to unlicensed veterinary technicians and those individuals considering that career path so they may license in Alaska.
- -I think it's a great idea!
- -It would benefit the students greatly.
- -Looking a student who is has born and raised in AK and attends the first two years here, it will be a jump understand food animal and equine basic husbandary. You know, muddy feed lots versus huntin your own moose.
- -Offering a prevet program doesn't seem especially helpful. After transferring, students might not do as well.

#### **Responses from Allied Professionals**

- -A program of this type would encourage youth who are already familiar with the special needs and environment of the villages to pursue a career in veterinary medicine.
- -As I understand it, and I have spoken to a fair amount of individuals interested in vet school, that there is a limited amount nationwide. Always an unmet demand for veterinary training. Different side of the equation than demand for the service. Not sure if there is more need, or more desire to work. There are people that want to do what I do, but they don't have a Dan around. He has personally trained a number of vets to do the procedures he does.
- -I think this is a superb idea!
- -Sounds great. Our institution may be able to provide internships or samples for special studies.
- -This becomes one of those issues where we have everything to gain and nothing to lose.

# Appendix E: List of Individuals Requesting Further Contact

- -Alice Velsko 3800 Lynn Dr Anchorage, AK 99508 ahvelsko@hotmail.com (907)240-7736
- -Anything you need I would love to help (Not like I have an opinion or anything on this subject) Susan Wagnon DVM Ravenwoo@mtaonline.net PS I currently have a recent graduated who went through the mentorship program at Chugiak HS, then had to get residence in WI to go to veterinary school. Another life long Alaskan. Sarah Smart DVM, I'm sure she wouldn't mind if you could use her for your surveys as well.
- -Colleen Gelvin DVM PO Box 81386 Fairbanks, AK 99708
- -Dee Thornell, DVM 2702 Peger Rd Fairbanks AK 99709 9074792800 drdee@alaskanoahsark.com
- -E. Paige Heywood, DVM (907)452-6104 akdoggeek@gmail.com
- -Greg Pietsch, DVM Aurora Animal Clinic 1651 College Rd Fairbanks, AK 99709 452-6055
- -I would be happy to be contacted. I am a graduate of UCD Dublin Ireland 1987 originally and have worked in the UK, Zimbabwe, Peru and finally settled for now in AK. I have my masters in veterinary economics/epidemiology and am always interested in the wider world of veterinary medicine outside day to day clinical practice.
- -Dr. Mary Huhndorf Twin Cities Vet Clinic (907) 262-4581
- -I would be interested in a teaching position if the school is created. John Lawrence Hightower, MS, DVM Old Bear Veterinary Services 12540 Atherton Road Anchorage, 99516 907.345.3759 (home) 907.529.4184 (cell)
- -I'm available to be asked again regarding input, etc. Teresa Beck DVM starpets@mtaonline.net 907-746-7387
- -Judy Montalbano 475 N. Begich Dr. Wasilla, AK 99654 judys@mtaonline.net
- -Karl Monetti, VMD box 56302 North Pole 322-0242 karlmonetti@gmail.com I would be interested in teaching a course, perhaps intro to surgery.
- -Melissa Rouge DVM 907-374-7005
- -Michelle Leibold DVM; 19025 Villages Scenic Parkway, Anchorage, Ak 99516 (907)345-5886 Please feel free to contact me. I'd like to learn more about these efforts and would be delighted to help.
- -Ralph Braoshes DVM E-mail address; dlowney@acsalaska.net
- -Renee Rember, DVM PO Box 83 Ester AK 99725 907-978-7453 docney@gmail.com
- -Stanley Diment DVM 12838 Leatrice Dr Clermont, FL 34715
- -Val Stuve POB 80308 Fairbanks, AK 99708 907-452-6055 day 907-457-8596 eve valarosa@yahoo.com or aacvet@ptialaska.net
- -Cindy Trout 5131 Manytell Ave Anchorage AK 99516
- -Lorelei Cuthbert Ravenwood Veterinary Clinic 16743 Coronado Rd. Eagle River, AK 99577 907-694-9665
- -Janiene Licciardi, DVM 2000 Harris Avenue Bellingham, WA 98225 (360) 441-1449 janienel@hotmail.com
- -Daniel M. Mulcahy, Ph.D., D.V.M., Dipl. ACZM daniel\_mulcahy@usgs.gov
- -I would like to receive a summary of this survey: Dr. Linda Comerci, DVM 1348 W. 11th Ave.

Anchorage, AK 99501 email: lrcdvm@acsalaska.net

- -Julie Grohs 688-9303
- -louisa.castrodale@alaska.gov
- -Mike Bradley mjbradley@anmc.org, bradleyak@gci.net
- -Please let me know if a degree program is instituted: Cheryl Rosa, D.V.M., Ph.D. Deputy Director U.S. Arctic Research Commission 420 L Street, Suite 315 Anchorage, Alaska 99501 Phone: (907) 271-4577 Fax: (907) 271-4578 crosa@arctic.gov
- -cort zachel, 898 Ballaine Rd, Fairbanks, AK 99709 479-3641

- -I have taught at the college level and one summer at a vet school in st. Kitts, plus 35 years experience in vet med with the last ten years spent as an emergency/critical care veterinarian. John Lawrence Hightower, MS, DVM Old Bear Veterinary Services 12540 Atherton Road Anchorage Ak, 99516 -My answers are directed toward the possibility of a veterinary technician program being implemented at UAF. I think it would be of great benefit to individuals that would be able to choose this career path without leaving Alaska.
- -Oh, I haven't met one of my opinions I have like yet:) Anything I can do to help, let me know. Ravenwoo@mtaonline.net
- -Joseph Klejka P.O.Box 449 Bethel, AK 99559 907 543 6028 work- Marian Frost Office: 907-694-9665 Home: 907-688-0312 e-mail: <a href="mailto:tundravet@yahoo.com">tundravet@yahoo.com</a>

## Appendix F: Letters in Support of Proposed Program at UAF

May 12, 2010

Dear Chancellor Rogers,

The Interior Veterinary Medical Association (IVMA) is writing to express our support for the development of a professional Doctor of Veterinary Medicine (DVM) curriculum at the University of Alaska Fairbanks (UAF). We are pleased to hear of its possible development as an articulated program (modeled after the relationship established by Nebraska and Iowa).

There is certainly a need for a clinical pathology facility in Alaska that is accessible for practitioners that could support diagnostics and education. The UAF would be an excellent facility for that. The roots of veterinary medicine are in agriculture (large animal, population health, and food safety) and the UAF is a great fit for this type of endeavor.

The majority of our membership represents clinical practitioners in the interior and would welcome professional curriculum students into a practical environment, offering opportunities to step outside of the classroom and introduce them to the practice of veterinary medicine. There are general practitioners and veterinary specialists in Fairbanks with a variety of interests and specializations that would be an asset to this type of curriculum (e.g., lecture instruction and laboratory exercises).

The number of veterinarians in Alaska is ever changing. There is a shortage of clinical practitioners, at times, especially in rural locations. This program could certainly address that need as well as helping balance the number of veterinarians in the state, making efforts to avoid too few as well as too many. We also recognize Alaska residents deserve a level playing field for pursuing careers in veterinary medicine and competing for "out of state" slots is highly competitive and tuition rates are very high (e.g., can be triple that for in state students).

Again, we are excited to hear of this possible new development and offer our support. Please contact us if we can be of any assistance.

Regards,

Sarah Love, DVM

President, Interior Veterinary Medical Association

cc: Drs. John Blake, Todd O'Hara

The IVMA letter above, from Sarah Love, represents the following interior vets:

Sarah Love <<u>sblovedvm@gmail.com</u>>

Angela Dowler, DVM < dav@gci.net >,

Barb Cole <a href="mailto:barbtylercole@gmail.com">barb Cole <a href="mailto:barbtylercole@gmail.com">barb Cole <a href="mailto:barbtylercole@gmail.com">barbtylercole@gmail.com</a>,

Betsy Roger, DVM <br/>
<br/>
brodger@mosquitonet.com>,

Camilla Lieske <cli>eske@gmail.com>,

Clint Crusberg, DVM < <a href="mailto:deltavet@pobox.wildak.net">deltavet@pobox.wildak.net</a>>,

Denali Lovely < <a href="mailto:lovely@mosquitonet.com">lovely@mosquitonet.com</a>>,

Heather Nevill <drfomite@msn.com>,

Jean Battig, DVM < ibdental@mosquitonet.com >,

Jeanne Maddux, DVM < imaddux@acsalaska.net>,

Jeanne Olson < corvi@mosquitonet.com >,

John Blake, DVM <jeblake@alaska.edu>,

Karl Monetti < karl@monettiguitars.com >,

Karsten Hueffer < khueffer@alaska.edu>,

Kimberlee Beckmen < <a href="mailto:kimberlee.beckmen@alaska.gov">kimberlee.beckmen@alaska.gov</a>>,

Krislyn DeLeon, DVM < c.deleon@att.net >,

Lis Lane <farthest\_north@hotmail.com>,

Margy Eastman, DVM < meastman@acsalaska.net >,

Mark May <mmay@goldenheartvet.com>,

Mary Sutherland < mary.dvm@gmail.com >,

Melissa Rouge < melissarouge@yahoo.com >,

Nadia Bacon <nadiabacon@hotmail.com>.

Nadine Obal <nadine.obal@us.army.mil>,

Nina Hansen < ninahansendvm@gmail.com >,

Paige Heywood <doggeek@msn.com>,

Renee Rember <docney@gmail.com>,

Sarah Love < sblovedvm@gmail.com >,

Scott Flamme <arsflamme@gmail.com>,

Suzanne Nolan < snolan5@alaska.edu >,

Tamara Rose < t.rose@alaska.net >,

Todd O'Hara < tmohara@alaska.edu >,

Val Stuve <valarosa@yahoo.com>

Scarlett Hall P O Box 161 Eagle, AK 99738

July 18, 2010

Brian Rogers, Chancellor Chancellor's Office 3<sup>rd</sup> floor Signers' Hall P O Box 757500 University of Fairbanks Fairbanks, AK 99775

Re: The necessity of a State Veterinary Program To Whom It May Concern:

As an introduction...We are Scarlett and Wayne Hall and live a subsistence lifestyle along the Yukon River below the town of Eagle. We have a large kennel of sled dogs that are used in our subsistence lifestyle and for dog tours with clients, in the winter, for income. We are supporters of the Quest and Percy DeWolf dog sled races that come through Eagle each winter. In fact, I am the Eagle Checkpoint Manager and Wayne spends a lot of time setting trails and working in other areas for the Quest. I was the vaccinator layperson until the program was cancelled and set up and worked with Dr Jayne when he came into town. It is important for us that our dogs are in top shape and very healthy.

The State of Alaska is woefully short on veterinarians and there is not a system in place that encourages people to enter the field. It is extremely hard for an Alaskan to become a veterinarian, as they would have to leave the state and thus pay out of state tuition to other states. This is just plain ridiculous!

Even more ridiculous is the many communities in Alaska who need the service of a veterinarian and do not have one available. We understand that there is a program being put together that would help Alaskans to become veterinarians and thereby also provide help into some of the remote communities that need veterinary services.

The interesting points of this program are that it would train students for their first two years at the University of Alaska Fairbanks and then send them to do their clinical work at another veterinary school in the lower 48. A rotation system could be set up where the student (paired with faculty or local veterinarians) would rotate through the different remote communities and provide services to un-serviced areas as they work to complete their training.

This appears to be a win, win situation and should be put into place as quickly as possible to encourage the growth of veterinarians in Alaska, provide the opportunity for Alaskans to become veterinarians and to provide services to communities without veterinary services.

Sincerely,
Scarlett Hall

Cc: John Blake

### Appendix G: Telephone Support Summaries

Following are reviews of telephone conversations between John Blake and individuals expressing support for the proposed program at UAF.

**Steve Torrence** - very favorable to this idea and is willing to help promote it. Steve was one of the last Alaskans able to go through the WICHE PSEP. Steve commented about new veterinarians coming to Juneau who are saddled with a very high debt load - up to 200K for some.

**Dave Hunt** - Current chair of the State examining board. Also very favorable response. Asked me to submit a letter to the board so it can be read into the minutes at their next meeting in October.

**Bob Gerlach** - State Veterinarian. Have had a few conversations with Bob but this excerpt from an old e-mail sums up his support: Thanks for the information and I think that your idea for a veterinary science department is great, considering the pivotal role this type of department should play in the future disease surveillance issues (domestic and wild animal diseases, food borne pathogens, zoonotic disease, invasive species) facing the state and the complexity that climate change and the need for development of local food sources will influence on this ecosystem health approach. There are a number of great opportunities that the university should take the lead on addressing in the state. I wholeheartedly support your efforts.

*Karl Monetti* - offer to assist. Very supportive.

**James Hagee** - Very interested in the program. Asked a lot of questions. Emphasized the importance of interaction with clinical vets in the first 2 years of a program.