



Lehigh Carbon  
COMMUNITY COLLEGE

and



Northampton Community College

VETERINARY TECHNICIAN  
ASSOCIATE IN APPLIED SCIENCE DEGREE

Program Audit

2012-2017

External Auditors:  
AVMA April 2017

Audit Prepared By:  
Judith Rex, Dean Allied Health and Sciences

Dr. Steven Marks  
Co-Director Veterinary Technician Program

## **Program Audit**

### **Veterinary Technician Program**

The purpose of this report is to serve as proxy for the customary Academic Audit report that is presented to the Board of Trustees. The rationale is due to the accreditation status through the AVMA of this allied health program. The program completed the self-study process between fall 2016 and spring 2017. The self-study report was submitted to AVMA in February 2017. The site visit team consisted of four visitors, along with a silent observer they conducted a two-day review of the program onsite at the Main Campus at Northampton Community College and Main Campus at Lehigh Carbon Community College in April 2017. This report will summarize highlights of the review; a copy of the Recommendation letter report is also attached.

#### **Program Purpose**

The Veterinary Technician Program of Lehigh Carbon and Northampton Community Colleges was founded in 1996 in response to local veterinarians needs for trained and knowledgeable personnel in the clinics. The program is Accredited through the American Veterinary Medicine Accreditation and is a two year, full time program and graduated receive a diploma from their respective school. The primary focus of the program is to provide the local veterinary community with well rounded, competent and compassionate entry level technicians to be employed in comparison animal and mixed animal practice.

#### **Recommendation**

Based on the past accreditations, the 2017 accreditation report was completed and submitted. Based on the recommendations of the AVMA and the results of the self-study and the program audit for 2012-2017 I recommend continuing the program. (See Appendix A)

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Dr. Steven Marks  
Co-Director, Veterinary Technician AAS

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Judith Rex, PhD, RN, BC  
Dean, Allied Health & Science Division

## **Executive Summary Highlights**

The Veterinary Technician Program of Lehigh Carbon and Northampton Community Colleges was founded in 1996 in response to local veterinarians' need for trained and knowledgeable personnel in the clinic. The program is a two-year, full time program and graduates receive a joint diploma with an Associate in Applied Science degree.

The primary focus of the Veterinary Technician Program is to provide the local veterinary community with well-rounded, competent, and compassionate veterinary technicians to be employed in companion animal and mixed animal practice. Our goal is to provide the students with the highest quality of education possible. The program, through its curriculum, strives to provide the students with a balanced and complete education in all areas of veterinary medicine. This ensures that the graduates are prepared, confident, and functional while working with different species. The program has also implemented a critical thinking based curriculum, in which students are able to apply their knowledge and work with various species and situations and develop into competent veterinary nurses. In addition to mastering all of the required critical skills/essential tasks outlined by our accreditation agency, we provide the skills that will allow the students to be life-long learners, competent communicators and the ability to work amicably with others. This balanced education will allow our graduates to become well-rounded individuals that are assets to their veterinary team and their community.

We will continue to incorporate more hands-on experience with animals in the area of venipuncture and continue our efforts to improve and be more consistent with National Board exam pass rates. We will also continue to produce evidence that all required critical skills are completed by all students and evaluated by program personnel, including a date(s) of completion. Lastly, we will work with the finance office, to obtain adequate financial support at both institutions for current student enrollment to ensure the ability to make adjustments when needed.

Continued accreditation of the Veterinary Technician Program is contingent upon construction of a contemporary Veterinary Teaching Hospital. Construction of a new Veterinary Technician Teaching Hospital is contingent upon capital funding currently being procured by Lehigh Carbon Community College. In conjunction with construction of new facilities, enrollment expansion is feasible and necessary. We believe it is feasible to increase student enrollment from the current annual enrollment of 40 students to an annual enrollment of 72 students over a period of two years given the current and anticipated community, human, academic, and institutional resources. Furthermore, the current market demographics both within the Lehigh Valley and nationally support a high demand for Certified Veterinary Technicians within the marketplace

## **CURRICULUM**

### **The Veterinary Technician Program's course objectives are:**

- The student will effectively participate in all aspects of facility management, practice communicating in a professional manner and carry out all duties within appropriate legal and ethical boundaries.
- Safely and effectively administer and dispense prescribed drugs to patients and clients respectively, while adhering to all pertinent regulatory guidelines.
- Demonstrate the ability to perform patient assessment techniques to obtain subjective and objective patient data to allow for accurate evaluation of the patient's physical status with minimum stress and maximum safety.

- Demonstrate the ability to perform husbandry, therapeutic and dentistry techniques (patient care) appropriate for our patients.
- Safely and effectively manage patients in all phases of anesthetic procedures.
- Safely and effectively manage patients undergoing surgical procedures.
- Safely and effectively produce diagnostic quality radiographic and non-radiographic images.

This program is considered a “joint” program between Lehigh Carbon and Northampton Community Colleges. The colleges are located 21 miles from each other with an easy commute on local highways (Route 22 and Route 78). Applicants to the program originate from the Lehigh Valley and surrounding areas. They apply to their respective institution based on, 1) the location of their residence and 2) their necessity of housing, as only Northampton Community College has on campus housing. Each incoming class contains a total of 40 students, which are divided equally between each college. All of the students that are accepted into the program attend veterinary technician courses together as a cohort; however, they take their general education courses at their respective “home” school. The veterinary technician specific courses are taught at both colleges. Students in the program enjoy full access and privileges at both colleges (both academic and recreational). Upon completion of the program, students receive an Associate in Applied Science degree. This degree is a joint diploma from the program, rather than from each college.

The program is truly a “joint” venture. Facilities, equipment, salaries, supplies and support services are all equally shared/supplied by the two colleges. Each institution provides a budget for the Veterinary Technician Program and thereby supports the activities of the program; twice yearly the accounts are reconciled. The co-directors are Dr. Steven Marks, hired through Northampton Community College (NCC) in 2014 and Dr. Lisa Martini-Johnson, hired through Lehigh Carbon Community College (LCCC) in 1999. Both co-directors are fully engaged in activities at both colleges (faculty searches, interviews, meetings, departmental activities, etc.). All of the adjunct instructors are hired through NCC at their teaching rates, but this expense is shared between both institutions.

The success of this program can be credited to the continued efforts of many dedicated instructors, supportive administrative personnel from both colleges, a dynamic and active advisory committee, the fresh new ideas and energy of our students, and the excellent performance by our externs and graduates in the community. We continue to have a strong applicant pool from the number of openings available at both colleges. Our program completion rates are approximately 90%. The National Board Exam Pass rates for the past three years (July 1, 2014 – June 30, 2017) is 92%.

Employment placement of graduates for the past five years (four months post-graduation) is 100% within the veterinary field. Employer and graduate surveys indicate a successful transition and competence in the workplace as entry-level veterinary technicians. We are clearly providing an affordable option to students who might otherwise not be able to afford such an education.

Naturally, any program will face its challenges, however, our reputation in the community and the full support the program has from both institutions provide the program with strength and stability. The most significant challenge to the program at present is as follows:

### **Veterinary Technician Teaching Hospital**

LCCC/NCC Veterinary Technician Program was designed to meet the standards established by the AVMA/CVTEA accreditation agency and has been accredited by the American Veterinary Medical Association since 1999. Multiple reports, either on a biennial or annual basis, have been prepared or sent to the accreditation agency. Maintaining “full accreditation” status throughout the years indicates a level of

competence and quality in the design and delivery of specific training in our program. A major recommendation by our accreditation body (AVMA/CVTEA), stated in our accreditation report, is to continue to develop plans and explore funding options to provide for a more contemporary veterinary teaching facility. This item was unmet in our last accreditation report (November 2015). Major recommendations apply to situations that jeopardize the ability of a program to meet a standard. Progress toward meeting each recommendation must be demonstrated and documentation of steps taken toward compliance with a major recommendation is required. Lack of compliance may be considered cause for reduction of accreditation status. In addition, to provide continued student outreach, we need to ensure that the vet tech facilities are expanded to reach the needs and expectations of future students. A contemporary facility with the necessary space and technological resources is critical, not only for accreditation but also to attract and maintain students. The current facility is marginally adequate in size for the number of students enrolled in the program. This is being addressed in current plans for funding and construction of a new veterinary technician teaching hospital.

During our recent accreditation site visit by the AVMA/CVTEA in April, 2017, the need for a new veterinary technician teaching Hospital was reported as a major deficiency with the following comments prior to the review meeting in November 2017: *“The Veterinary Technician clinical facility is small for the number of students enrolled in the program, however, the program outcomes on the VTNE are excellent and consistently above the national average. The Program’s overall pass rate is 89%. Plans have been drafted and funds are being identified. In March 2016, the Board of Trustees of LCCC authorized the administration to submit a Capital Funding Application to the Pennsylvania Department of Education (PDE) for a new Vet Tech Teaching Hospital. The application asked for one million dollars with the understanding that approval for funding will require the college to provide a fifty percent local match. Since the accreditation site visit the Board of Trustees of LCCC increased the amount requested from the PDE to two million dollars with the understanding that approval for funding will require both colleges to provide one million dollars combined. Hospital and program expansion meetings at both institutions have been ongoing. Discussions at these joint meetings have included next steps for the teaching hospital funding and design, distance learning potential, equipment and supply needs as well as the accreditation time line.”* During our site visit, the review team made it clear that continued AVMA/CVTEA accreditation is contingent upon completion of a more contemporary veterinary technician teaching hospital.

In conjunction with plans for construction of a new veterinary technician teaching hospital, the feasibility of expanding student enrollment from 40 students per class to 72 students per class are being explored within this report. This expansion would be phased in over two years to achieve 50% capacity the first year and 100% capacity the second, assuming the proposed timeline for hospital construction is achievable.

The Veterinary Technician Program is designated as a part of the Allied Health Division at Northampton Community College (NCC) and the School of Science, Engineering and Mathematics at Lehigh Carbon Community College (LCCC). The partnership of Lehigh Carbon and Northampton Community Colleges Veterinary Technician Program makes communication a quintessential element of the program. As explained below, effective communication between administration at the institutions and also between faculties is practiced to ensure the continued success of the program. Doctors Marks and Martini-Johnson have a very close professional relationship. When Dr. Marks was hired (July 2014), Dr. Martini-Johnson worked closely with him to ensure that he was informed of the details involved with his position as co-director, guided him through the program policies and procedures, introduced him to college administration and faculty, and informed him of the regulations and guidelines of the AVMA /CVTEA. The joint nature of the program made this a large undertaking, but working together created a strong relationship between Doctors Marks and Martini-Johnson. They continue to openly communicate and to discuss all routine student and program issues together. Dr. Marks attends all meetings involved with

administration at NCC college and Dr. Martini-Johnson attends all meetings at LCCC. These include: monthly coordinators meetings, division meetings and administrative staff meetings. These meetings involve administrative and academic program staff. Attendees discuss an agenda provided by the respective dean, which commonly includes institutional and program policies, strategic planning initiatives and budgetary updates. Any concerns within the program, that would require additional assistance, are brought to the attention of the college's respective deans. The program co-directors report jointly to the designated dean at both LCCC and NCC. Both deans are easily accessible by email, phone, or by scheduling formal and informal meetings. Our program is fortunate that deans from both institutions maintain an open-door policy. The deans provide direction to the program with sensible solutions to a wide variety of program issues. The deans also routinely communicate with one another and travel between colleges to attend administrative meetings associated with the program. Both deans are on the advisory committee and attend committee meetings. Dr. Marks meets with Dean Judith Rex of NCC and Dr. Martini-Johnson meets with Dean Larissa Verta of LCCC to discuss program related needs and changes on a regular basis.

Any need for additional assistance is provided by the Vice President or President of the respective schools. The co-directors routinely communicate with the Vice Presidents. Although the individuals in the position of Vice President are relatively new to their roles at each college, they both show a sincere interest in learning about and supporting the program. Upon his appointment as Vice President at LCCC, Dr. Thomas Meyer scheduled a meeting with the co-directors in order to become familiar with the program and its unique "joint" affiliation. The Vice President of Academic Affairs at NCC, Dr. Carolyn Bortz is very familiar with the program as she was the program's dean for many years. The collaborative efforts and strong communicative support from higher administration at both schools creates a productive and confident working environment for all of the program staff. The following summarizes the line of communication at each college:

**Lehigh Carbon Community College:**

President: Dr. Ann Bieber

Vice President for Academic Services and Student Development: Dr. Thomas Meyer

Dean of Academic Services - School of Science, Engineering, and Mathematics: Larissa Verta

Co-Director of the Veterinary Technician Program: Dr. Lisa Martini-Johnson

**Northampton Community College:**

President: Dr. Mark Erickson

Vice President for Academic Affairs: Dr. Carolyn Bortz

Dean of Allied Health and Science: Dr. Judith Rex

Co-Director of the Veterinary Technician Program: Dr. Steven Marks

In addition to staff communications as mentioned above, considerable and ongoing input from the Veterinary Technician Advisory Committee has been sought and incorporated in this report. Members of the Veterinary Technician Advisory Committee can be found in Appendix A.

**PLANNING AND RESOURCE ALLOCATION**

- Three-year budget at both Institutions.
- In the past five years, the colleges have provided adequate financial support for current student enrollment. The Program has benefited from the fact that it is supported by two individual colleges.
- For the next academic year, a major budget request would be an increase in our accreditation budget line item; we would need to increase \$1,500 for a total of \$2,500. This amount will also be

requested at NCC. Our accreditation visit is April 5–7, 2017. Another increase in budget would be for dog and cat food during the fall and spring semesters. Prior to this year Hill's Pet Nutrition has supplied food for veterinary technician programs throughout the United States and recently (January 2016) we found out that they are no longer going to provide food to veterinary technician programs free of charge. This has impacted all veterinary technician programs across the United States and we are currently looking into other vendors to see if they would provide food free of charge. If we cannot find a vendor to provide food for our dogs and cats then our budget request for an increase would be approximately \$500 per year.

- Facilities, equipment, salaries, supplies and support services are all equally shared or supplied by the two colleges. Each institution provides a budget for the Program and a reconciliation of accounts is performed twice yearly.
- The Program is eligible for additional state funding through a stipend based on the FTE's generated in the program. The concern is a decrease in state funding and the effect it may have on all college programs. The program has received capital funding and Perkins Grant money for equipment from both institutions each year. There are several student scholarships available to Program students, each academic year, ranging from \$250-\$1,000.
- A concern to the program is to find funding for a more contemporary veterinary teaching facility, which is required by our accreditation. However, in February 2016, Brian Mahler received a preliminary cost estimate for a large animal facility. In March 2016, the Board of Trustee at LCCC authorized the administration to submit a Capital Funding Application to the Pennsylvania Department of Education for a new Veterinary Teaching Animal facility.

## **INSTITUTIONAL RESOURCES**

The following lecture/laboratory classrooms are routinely used by the program but they are considered common space shared between multiple programs/divisions. Overall the lighting and ventilation in all facilities/classrooms used by the program are adequate for instructional purposes.

All classrooms utilized by the veterinary technician program are technology enhanced, however, the lecture classrooms do not have adequate space for the number of students in our program. We are in need of more dedicated classroom space at LCCC for our students so that the classrooms are more conducive to student learning and have the ability to have group interactions with the students.

LCCC: The majority of lecture sessions are held in the Science Hall building. Lecture classrooms are SH 05 (student capacity: 36; however, the classroom holds 30–32 students; we have additional tables and chairs brought in), SH 10 (student capacity: 30; we have additional chairs and tables brought in), SH 143 (student capacity: 54; this classroom is not conducive to student learning, in that, sound proofing from other classrooms does NOT exist) and TC 110 (student capacity: 32; this is used due to our adjunct instructor who is hearing impaired, however they also have additional tables and chairs brought in).

The laboratory sessions for Parasitology are held in SH 102 (student capacity: 18–20)

All animal clinical laboratories are held in the Vet Tech Animal facility (student capacity: 20; see below for more details).

NCC: The majority of lecture sessions are held in the College Center building. The lecture classroom is CC-169 (student capacity 48). The laboratory sessions (Anatomy and Physiology and Clinical Laboratory Techniques courses) are held in Penn Hall 238 (student capacity: 24).

The Vet Tech Animal facility is only utilized by the Veterinary Technician Program for teaching large animal clinical procedures, small animal clinical procedures, Radiology/Surgical Nursing and Anesthesia and Lab Animal and Exotics courses. The facility is inadequate in size for the number of students in classes; it does not emulate a contemporary veterinary environment, required by our AVMA accreditation. This space is small and includes a classroom that is technology enhanced with three separate wards for rabbits, guinea pigs, rats/mice, dogs and cats. The dog and cat ward is one room and should have two separate areas for each species. In addition, a surgical suite, surgical prep room with recovery cages, radiology room and dark room. The large animal space includes two horse stalls and one bovine stall with an additional stall for supplies on one side and two stalls on the opposite side for storing hay and grain and a storage area for shavings. There is a fenced corral area adjacent to the vet tech animal facility; within the corral is a 6 ft. chain link fence area for housing goats. There are two 10 x 15 wooden three-sided sheds used to provide shelter for animals in the pasture (horses and calves) and for the goats (within the chain link area). There is adequate lighting and ventilation in the facility.

Currently a strategic plan is in place for funding a new vet tech animal facility for the program. The College continues to review and examine the infrastructure needs of the Veterinary Technician Animal Facility. The Lehigh Carbon Community College Strategic Plan for 2014 – 2017 (Many Voices, One Vision) incorporates aligning facilities and technology management with annual mission-based priorities and the college budget. In 2015 we did create a plan to modify our current facility for our existing Veterinary Technician program and allow for some growth. We determined a footprint of approximately 4,200 sq. ft. that would be required for the Large Animal Facility and 7,800 sq. ft. for the Small Animal Facility for a total of 12,000 sq. ft. This space would enhance classroom instruction, clinical labs, storage and facilities for the animals. As we proceeded to implement this plan we unfortunately were unable to acquire the additional space in the building we are currently leasing. We are currently reviewing the ability to create a large pole barn for the large animal facility external to our current building to accommodate our needs. In addition, we are also in the exploratory phase of building a new facility on our campus. The square footage and layout previously discussed will be reviewed by an Architect for design possibilities and cost. Funding initiatives continue to be explored with a focus on grants, PDE Capital funding and our Foundation seeking Community support.

Use of library resources and technology is evident in our program, in that, we have our first year students in our Introduction to Veterinary Technology course meet in the library at NCC and go over various technologies, referencing, archiving etc. This is scheduled every year as our students have research papers and reports required in our curriculum. They also have various veterinary software “AVIMARK” assignments using the computers in the library at both institutions. As part of our accreditation it is required that we continue to expand library holdings of texts relevant to our program. The library at NCC continues to order veterinary technician texts to continue to increase our references for students.

In January 2016, we contacted NCC’s library about working with us to obtain On the Floor Dove. On the Floor Dove is an online educational training tool that features real animal patients as they are treated in a veterinary hospital. The digital training videos allow students to see treatment skills, emergency techniques, surgical procedures, pharmacology, laboratory procedures, anesthesia, radiology etc. prior to performing the skill on a live animal patient. It also includes videos addressing Human Resource solutions, client communication and best practices in veterinary medicine. We worked with the company to pay one cost for 50 students/instructors; all of our second year students as well as all of our instructors in the program have access for one year. We are hopeful that each year the library will have funds available to continue this valuable resource for our vet tech students

## **FULL-TIME FACULTY**

The program is fortunate to be staffed with a wide variety of dedicated and unified personnel. The co-directors



work closely to ensure that the program is as up to date and is as relevant to clinical practice as possible. The directors have made it a priority to provide the students with as much hands-on learning as they can and continue to research new technology and teaching methods to benefit the students. The veterinarians and certified veterinary technicians working in the program all specialize in different areas of veterinary medicine. Dr. Steven Marks has clinical experience in small animal, large animal, exotic animal and zoo/wildlife medicine. Dr. Lisa Martini-Johnson has clinical experience in small Animal medicine and is also a certified veterinary technician. Dr. Charlie Rinehimer has clinical experience in small animal and large animal (Equine and Bovine). Tracey D'Imperio- Lasslett, CVT has experience in lab animal and exotics as well as being a licensed wildlife rehabilitator. Amy Weiland, CVT has clinical experience in large animal medicine and has special interest in small animal medicine. Diane Schuette, CVT has clinical experience in small animal and avian hematology and laboratory procedures with over 30 years' experience. Marissa Treanor, CVT has a special interest in small animal medicine and parasitology. Their specialized knowledge compliments the diverse interests of the students and provides them with a rich classroom experience.

- Professional Development activities/Organizations

Dr. Steven Marks and Dr. Lisa Martini-Johnson are active members with IACUC (Institutional Animal Care and Use Committee) – Dr. Martini-Johnson is the Principle Investigator and chair, Veterinary Technician Advisory Committee chairs, AVTE (Association of Veterinary Technician Educators), LVVMA (Lehigh Valley Veterinary Medical Association).

Dr. Marks is also an active member of the PVMA (Pennsylvania Veterinary Medical Association), AVMA (American Veterinary Medical Association) and AAHA (American Animal Hospital Association). He is also the owner/ veterinarian of Dublin Veterinary Hospital.

Dr. Martini-Johnson is also an active member of NAVTA (National Association of Veterinary Technicians in America), PVTA (Pennsylvania Veterinary Technician Association) and AALAS (American Association for Laboratory Animal Science).

Dr. Lisa Martini-Johnson has edited/reviewed/authored the following since 2011:

2011 – Wrote questions for a textbook titled “Principles and Practice for Veterinary Technicians”, 3<sup>rd</sup> edition, Elsevier.

2012 – Reviewed a book proposal titled “Hematology for the Veterinary Technician”, Wiley-Blackwell.

2012 – Edited a textbook titled “Surgical Instrumentation for the Veterinary Technician”, Wiley Blackwell

2013 – Authored two chapters (Urinalysis and Hematology) for a new laboratory manual titled “Laboratory Procedures for Veterinary Technicians”, Elsevier.

2014 – Revision to my previous authored chapter on Urinalysis in “Laboratory Procedures for Veterinary Technicians”, Elsevier.

- Continuing Education: The ever changing health care arena and the expanding scope of veterinary medicine, makes continuing education a mandate for veterinary technician educators. We must possess knowledge about emergent diseases, new treatment plans, and recommendations by national agencies. We continually research the literature for evidence of best practices and advances in medical and veterinary management of animal patients. We also keep abreast of current information and trends in veterinary medicine

### **CURRENT FACULTY/STAFF (FTE)**

Number of faculty/staff and full-time equivalents (FTE) devoted to the veterinary technology program and salary information only include faculty/staff from other departments who teach core veterinary technology courses to program students:

Rank	Head Count	FTE	Maximum Salary	Minimum Salary	Average Paid Current Year	Length of Contract (9-month, 10-month, 12 month)
NCC Program Co-Director	1	1.0	\$79,458	N/A	N/A	12 month
LCCC Program Co-Director	1	1.0	\$74,909	N/A	N/A	12 month
Adjunct Veterinarian	1*		\$9,616	\$9,215	\$9,616	Course by Course
Credentialed Veterinary Technician	7	**see individual breakdown below	\$12,684	\$3,640	\$6,920	Course by Course

\*Denotes 1 adjunct veterinarian who is full time faculty at NCC and teaches for the program part time. His salary is included in credentialed veterinary technician salary for adjuncts as a whole.

\*\*The following outlines Credentialed Veterinary Technician participation in the program:

1. Tracey D'Imperio-Lasslett, RVT  
Total FTE's: 0.4
  - Veterinary Anatomy and Physiology Laboratory
  - Laboratory Animal Science and Exotics Lecture and Laboratory
  - Veterinary Parasitology Lecture
2. Amy Weiland, CVT  
Total FTE's: 0.6
  - Animal Management and Nutrition Lecture
  - Small Animal Clinical Procedures Laboratory Assistant
  - Large Animal Clinical Procedures (Equine portion of course)
  - Radiology and Surgical Nursing Laboratory Assistant
3. Marissa Treanor-Lyman, CVT  
Total FTE's: 0.26
  - Veterinary Anatomy and Physiology Laboratory
  - Veterinary Parasitology Laboratory

4. Tiffany Bass, CVT  
Total FTE's: 0.23
  - Introduction to veterinary Technology
  - Laboratory Animal Science and Exotics Laboratory
5. Charlie Rinehimer, DVM  
Total FTE's: 0.13
  - Veterinary Anatomy and Physiology Lecture
  - Large Animal Clinical Procedures (Bovine portion)
6. Diane Schuette, CVT  
Total FTE's: 0.26
  - Clinical Laboratory Techniques Lecture and Laboratory
7. Kim Rohrbach, CVT  
Total FTE's: 0.44
  - Small Animal Clinical Procedures Laboratory Assistant
  - Radiology and Surgical Nursing Laboratory Assistant
8. Lori Balliet, CVT, VTS (Clinical Pathology)  
Total FTE's: 0.26
  - Clinical Laboratory Techniques Laboratory

### **PROJECTED INCREASE IN FT/PT EMPLOYEES**

It is anticipated that the number of full-time staff would remain the same with a Co-Director at each institution (NCC & LCCC). The number of additional adjunct faculty projected is outlined in Appendix J assuming 76% capacity in FY20. Currently we employ seven adjuncts in the program for a total of 2.45 FTE. This projection also assumes a lecture classroom that would hold at least 72 students and clinic/lab facilities that can accommodate 24 students.

In addition to an interest by existing adjuncts, the following individuals from the community have expressed potential adjunct interest:

- All Current Vet Tech Program adjuncts
- Rebecca Remaly, CVT
- Kristine Rigler, CVT
- Renee Tallman, CVT
- Scott Rosenbloom, VMD
- Erica Tramuta-Drobnis, DVM
- Michelle Samdrock-Corror, DVM
- Kristina Bufanio, DVM
- Course List
  - **LCCC Location**
    - VET120-Veterinary Parasitology- Lab & Lecture
    - VET210-Large Animal Clinical Procedures-Lab & Lecture
    - VET215-Animal Disease-Lecture
    - VET218-Pharmacology-Lecture

- VET220-Small Animal Clinical Procedures-Lab & Lecture
  - VET225-Veterinary Radiology, Surgical Nursing, and Anesthesia-Lab
  - VET228-Lab Animal and Exotics-Lab & Lecture
- **NCC location:**
    - VET110-Intro to Vet Tech-Lecture
    - VET101-Vet Anatomy and Physiology-Lab & Lecture
    - VET115-Animal Management and Nutrition-Lecture
    - VET125-Clinical Laboratory Techniques-Lab & Lecture
    - VET225-Veterinary Radiology, Surgical Nursing, and Anesthesia-Lecture
    - VET230-Externship Seminars
- **Staged Enrollment Increase over 2 years:** Target class size of 56 the first year then increase to 72 students in 2 years.
  - **Additional program offerings (grooming, etc.):** Within the concept design for a new Veterinary Technician Teaching Hospital there could be a grooming facility to offer a grooming certificate program. Also, the development of two new distance learning courses and a new veterinary terminology and communications course to launch in 2019. Please refer to page 16 for suggested non-credit course offerings.

## **COMMUNITY INVOLVEMENT**

- VTP Advisory Committee members.
- Our Advisory Committee meets once per year in the Fall as requested by our committee members. Should another meeting be needed then the committee members will be contacted for a priority meeting in the Spring.
- The program has a very active, dedicated and supportive advisory committee. The committee consists of local veterinarians, veterinary technicians, instructors in the program, college administration, pharmaceutical representative and a current second year student in the program.
- Most recent advisory committee meeting minutes. (See Appendix W)
- Student Chapter of NAVTA club: Our students engage in many activities at both institutions and within the community. They participate in “Open House” events at both colleges and local high schools if allowed, promote awareness throughout the year as well as National Veterinary Technician week (October), create fundraisers (candy bar sales, bake sales, homemade dog biscuits sales etc.), and provide charitable contributions to various animal rescue organizations. Some activities that the students have participated in include:
- Animal Food Bank of the Lehigh Valley, Lehigh Valley Zoo community events, “Pet Photos with Santa” at Phillips Feed and Outlet, Bark for Life Canine walk, Paws in the Park etc.
- Our club officers often participate in emerging student leadership seminars (student activities at NCC) that include discovering core values and Myers/Briggs personality testing. These seminars strengthen the students’ communication skills and engage them as active members of a team, both of which are necessary skills for a practicing veterinary technician. The student club enhances the students’ clinical

education and career development, while promoting competent care and humane treatment of animals. The students' charitable work reinforces their responsibility as professionals in the veterinary community and offer services and assistance to animals in need. They engage in fundraising efforts which supports their charitable contribution to various animal organizations, donations to local animal rescue groups, wildlife rehabilitation centers and more. Their charitable work reinforces the responsibility they have as professionals in the veterinary community to offer services and assistance to animals in need. The plethora of activities also serves to establish a "learning community" in the program which helps students to find support and camaraderie amongst peers which enhances retention and increases the likelihood for successful completion of the program.

- Service learning projects: We have spent time advising students on Emergency Preparedness, Evacuation and Pet First aid kits. In 2007, we obtained a federal funded SAFE grant (Supporting Actions for Engagement) through NCC and since then we continue to prepare these Pet First aid kits with our club funds and distribute them to various organizations (local animal shelters and rescue groups, Bethlehem and Allentown Police departments, public events and the Lehigh Valley Kennel club. Our students demonstrate a great deal of "civic engagement" and community service through the activities of the veterinary technician club. This type of service is part of the missions of our colleges to encourage the development of "civic minded" graduates.
- Community partnerships:
  - Prior to graduation, our students are required (AVMA accreditation) to participate in a ten-week (240 hours total) Senior Externship course conducted off-campus at two designated (veterinary) community sites. This is a clinical experience required of students following satisfactory completion of all veterinary technology courses with a grade of "C or better in each veterinary technician course. This capstone experience is aimed at providing students the opportunity to integrate the academic knowledge, critical thinking and technical skills developed during the program and directly apply and refine them in a work setting. It also serves as an opportunity to explore career options. Currently there are approximately 55 clinical sites that serve as our externship sites, giving the students the opportunity to work in a variety of different settings.
  - For our Large Animal Clinical Procedures course, offered during the summer, two weeks (Sheep and Goats) of the eight weeks is conducted off-campus at the Lehigh Valley Zoo in which students perform necessary procedures (vaccinations, blood draws, hoof trimming etc.) on these farm animals as well as other species such as 21 pigs, llamas and alpacas. They also have the opportunity to tour the zoo and learn about the many different species encountered there.
  - We have an annual field trip, for our first year students, at a local horse farm during our Anatomy and Physiology course their first semester.
  - We have expanded our non-profit animal resources for our Small Animal clinical procedures course and our Radiology, Surgery and Anesthesia course to include Last Chance Ranch, Inc. (2015) and continued use of The Sanctuary at Haffsville. We are currently speaking with Feline Finish Line Rescue as another resource for our Surgery/Anesthesia course this semester; to provide cats for dentals, spays and neuters.

<b>RETENTION</b>	Example (2011 – 2012)	(July 1, 2012 – June 30, 2013)	(July1, 2013 – June 30, 2014)	(July 1, 2014 – June 30, 2015)
E = Enrollment (as of July 1)	79	66	72	71
NS = New Starts (July 1 to June 30)	36	40	38	40
RE = Re-entries (July 1 to June 30)	12	0	0	3
G = Graduates (July 1 to June 30)	22	24	30	33
EE = Ending Enrollment (as of June 30)	90	72	71	69
Retention % (EE + G) / (E + NS + RE)	88.18%	90.57%	91.82%	89.47%

## **EDUCATIONAL EFFECTIVENESS**

- Qualitative assessment data for the overall effectiveness of the program in meeting mission goals and objectives. Our students must develop an academic foundation of knowledge which entails associative learning but with time they must also be able to apply that knowledge in a critical thinking manner. In a sense we are asking for associative learning, manual skills and decision-making ability (the ability to apply knowledge in a realistic context). We continue to incorporate critical thinking exercises in all courses. Clearly the breadth of this training is extensive. Teaching strategies and forms of assessment used to evaluate students are traditional testing, laboratory practicals, research papers, clinical assessment (most valuable tool to assess student competencies on required tasks), and externship site evaluations, performance on the National Board Exam and Graduate and employer surveys. (See Appendixes X, Y, Z, and AA)
- Qualitative assessment data from current and former students indicating educational preparedness and effectiveness of courses in the program. The following is a summary of the assessment data: (See Appendix BB: Graduate Survey)
- In general, our graduates felt that the program prepared them very well in order to perform as a veterinary technician. The majority of the feedback was very positive.
- Approximately 84% of the students were very satisfied and 16% were satisfied with the in-class quality of instruction. Between 79%-95% of the students felt that the program contributed to their knowledge, skills and development with respect to our program specific outcomes. One Hundred percent of the students would recommend our program to others.
- When graduates were asked “what suggestions for improvement could be made to the program”, the consistent response was that they would like more “hands-on” experience. This included more jugular blood draws, surgical nursing and anesthesia monitoring, more experience preparing for communication with clients and hospital environment and to continue to review clinical laboratory techniques throughout their second year.
- Qualitative assessment data from employers assessing our graduate performance. The following is a summary of the assessment data: (See Appendix CC: Employer Survey)

In general, all of the surveyed employers were very happy with the performance of our graduates. Employers indicated that graduates were most prepared in the following areas:

Medical Nursing – 95% Laboratory procedures – 86%

Radiology/Diagnostic Imaging – 86% Pharmacology – 65% Surgical nursing – 65%

Employers indicated that graduates were the least prepared in: Client relations and Anesthesia

- Other methods of assessment are Externship Host Site Evaluations and Student Evaluations of the Externship Host Site. These evaluations are very insightful and give the program valuable and current feedback on student preparedness and performance in all areas of study. These evaluations are one of the most accurate tools that the program utilizes to make course adjustments. We rely heavily on this feedback because it is generated from a variety of observers and because the sponsors are asked to carefully evaluate student's performance including clinical aptitude (required critical skills tasks) and "soft skills". The "soft skills" include punctuality, work ethic, reliability and ability to effectively communicate with staff and clients. (See Appendix DD: Externship Host Site Evaluation and Appendix EE: Student Evaluation of Site)
- When students complete their externship rotations they complete an evaluation of the externship host site. This evaluation questions the students on their preparedness and competency. Students are also asked to make suggestions for improvements that could be made in the program to enhance their academic training. These evaluations are meaningful, in that the students are giving current feedback immediately after their experience in the veterinary facility.
- Another method of assessment data comes from our VTNE (Veterinary Technician National Board Examination) results. The co-directors review all of the National Board exam results and identify any areas that may need attention. Relative scores in categories dictate where curriculum revision is needed.
- Evidence of measures taken to improve effectiveness based upon data collected from current and former students and employers.
- The co-directors review all of the data that is received from the graduate and employer surveys as well as the externship Host Site evaluations and the Student evaluations of the Host Site. When common themes emerge, it is brought to the attention of the advisory committee and a strategy is developed and put in place. After changes are made, students are commonly asked questions to assess the expected outcomes. In addition, course alterations that provide measurable outcomes are evaluated in order to assess the efficacy of the change.
- Our responses to the related deficiencies identified by graduates and employers are as follows:
  - Increasing "Hands-on" Experience/Venipuncture/catheter placement: Although program students are competent to enter the workplace as "entry-level" veterinary technicians' graduation, many of them are uncomfortable without the feeling of "mastering" all of the required skills. All of the program faculty encourage the students to work in a clinic while attending the program; this is addressed in their first semester. This gives the students the opportunity to apply knowledge and skills they have attained and practice their techniques in a clinical setting. In addition, we increased the total amount of externship hours from 180 to 240 hours in 2012 giving the students more time to "master" the essential skills. Over the past few years, the program has acquired many new teaching manikins. These models allow the students to practice their blood draw techniques before performing the skill on a live animal patient. The student responses to the models are very positive and students feel more comfortable performing the tasks on live animals; the manikins strengthen the students'

knowledge on techniques and tactile skills. During our surgery portion of the course (VET225) students perform placing two intravenous catheters on select surgical patients, jugular, cephalic and saphenous blood draws, cystocentesis, etc. Students also perform blood draws on patient a week prior to the surgery in order to run bloodwork (CBC and chemistry).

- Anesthesia – More ‘hands-on’ experience in anesthesia has been incorporated into our Pharmacology course. This “mini-course” familiarizes the student with anesthetic equipment and its function, drug advantages and disadvantages and prepares them in advance for performing anesthesia on a live patient the following semester. We have also incorporated anesthesia review material in VET 225 prior to starting the surgery portion of the course. The anesthesia review is both lecture based and critical thinking based. There are three new anesthesia worksheets/workshops required of the students.
- Client relations – In their first semester, students participate in interactive question and answer sessions in the Introduction to Veterinary Technology course that stimulate common scenarios that they may encounter with clients in practice. During their second year, students interact with rescue group representatives in Small Animal Clinical Procedures and Radiology, Anesthesia and Surgical Nursing course. These interactions include answering the phone, taking patient histories, reviewing and explaining discharge instructions and dispensing medication.

**INTEGRITY - (Accreditation/Certification Schedule, Reporting Process, Results):**

- National Board results for the last three years including comparative National data:

Year	Month	Graduates Eligible	# of first time test takers	# Passed	#Failed	NCC/LCCC Pass Rates	National Average of 1st time test takers	National Average Score all Candidates
2013 (Grads=30)	MAR/APRIL	--	2	2	0	100%	72.27%	63.67%
	JULY/AUG	--	1	1	0	100%	77.03%	72.53%
	NOV/DEC	30	21	20	1	95.24%	67.90%	59.81%
2014 (Grads=33)	MAR/APRIL	--	5	2	3	40%	68.57%	60.44%
	NOV/DEC	33	27	25	2	92.59%	71.76%	66.32%
2015 (Grads=31)	MAR/APRIL	--	3	3	0	100%	66.06%	58.01%
	JULY/AUG	--	0	0	--	--	73.19%	68.52%
	NOV/DEC	31	24	22	2	91.67%	67.56%	59.49%

- The accreditation agency associated with the Veterinary Technician Program is the AVMA (American Veterinary Medical Association) Committee on Veterinary Technician Education and Activities (CVTEA).
- Our last biennial report was September 2015 and the results from the accreditation agency (November 2015) continued the Veterinary Technician program on full accreditation. The next accreditation site visit is scheduled for April 5 – 7, 2017. After consideration of the documentation provided, the Committee has determined that continued reporting is required



on the following deficiency:

(See Appendix FF: Current AVMA/CVTEA Accreditation Report)

- Reporting occurs on a biennial basis, unless otherwise stated by the accreditation agency. The content of each report varies based on the last site visit and if any deficiencies have been noted by the committee. Site visits occur every 6 years.

## **PROGAM COSTS (Appendix C)**

## **CONCLUSIONS**

The program is a two year, full-time program and graduates receive a joint diploma with an Associate in Applied Science degree from their respective institution. The primary focus of the Program is to provide the local community with well-rounded, competent and compassionate entry-level veterinary technicians to be employed in companion animal and mixed animal practice.

Program Strengths:

- Dedicated, student-oriented program co-directors who provide effective Program leadership and stability to the program.
- Enthusiastic, diverse, stable Program personnel who effectively model the veterinary team concept and are dedicated to developing strong Program graduates.
- The curriculum demonstrates a logical sequence and meets AVMA criteria.
- Utilization of a competency checklist for documenting required student critical skills assessment required by the AVMA/CVTEA accreditation agency.
- Dedicated, reliable animal resources (rescue groups) for use in instruction
- Administrators from both campuses who are strongly supportive of the Program.
- Program is eligible for Perkin's Grant money and Capital funding from both institutions.
- A very active and supportive Program advisory committee.
- A dedicated and supportive IACUC committee
- Collegial, experienced general education faculty.
- Effective communication between both institutions and the Program.
- Community support of the Program
- Enrollment has been steady and the applicant pool has remained strong at both institutions.
- An affordable alternative to private colleges offering similar training.
- All facilities used in Program instruction is OSHA compliant
- Competitive admission process that endeavors to select the students most likely to succeed.
- Large number of veterinary technology relevant textbooks in the library collection at NCC and excellent support services. Enthusiastic and engaged students
- Students demonstrate a high passing rate (90% +) on the Vet Tech National Board exam the past two years.

- There is a 100% placement rate for students after graduation and the outlook for further employment of graduates is excellent.
- Both colleges provide adequate financial support for current student enrollment and has excellent support from both institutions.
- Diverse array of teaching models

Program Challenges:

- The Program has met or exceeded the academic standards for full accreditation by the AVMA/CVTEA, since 1999,
- The admissions process should be consistent between campuses. Currently, it is a challenge at NCC since there is no set “Vet Tech Application” as there is at LCCC. This creates confusion with applicants applying at NCC.
- Incorporating more hands-on experience with animals in the area of venipuncture.
- Efforts continue to be made to improve and be more consistent with National Board exam pass rates.
- Continue to produce evidence exists that all required critical skills are completed by all students and evaluated by program personnel and include a date(s) of completion.



Sent via email to [lmartinijohnson@lccc.edu](mailto:lmartinijohnson@lccc.edu)

November 13, 2017

Dr. Lisa Martini-Johnson & Dr. Steven Marks  
Lehigh Carbon & Northampton Community Colleges  
Veterinary Technician Program  
3835 Green Pond Road  
Bethlehem, PA 18020

Dear Dr. Martini-Johnson and Dr. Marks:

Congratulations! At its November 2 – 5, 2017 meeting, the AVMA Committee on Veterinary Technician Education and Activities (CVTEA) granted continued full accreditation to the Lehigh Carbon & Northampton Community Colleges veterinary technician program after deliberation of the report of evaluation from the April 5 – 7, 2017 site visit. Accreditation remains in effect until your next site visit, contingent upon favorable review of requested reports.

A final copy of the report of evaluation is included and a copy will be sent to college administration as indicated in the near future. Included is a summary of critical and major deficiencies with details regarding future reporting requirements.

The Committee considered the post site visit response to the critical and major deficiencies in its accreditation decision. After consideration of the documentation provided, the Committee has determined that continued reporting is required on the following deficiencies (see chart(s) below):

Critical deficiency(ies): 3

Major deficiency(ies): 1

The program is on a biennial reporting schedule. The next biennial report will be fall 2019 (deadline date to be determined) to address the above deficiencies. The report template will be sent out approximately 2 months prior to the due date.

In accordance with the *Policies and Procedures of the AVMA CVTEA*, documentation of progress toward compliance with critical and major deficiencies must be included in the program's report to CVTEA. Insufficient progress toward meeting deficiencies may be considered cause for reduction of the program's accreditation status. If there are any changes that impact critical or major deficiencies that the CVTEA previously determined do not require continued reporting, the program must report this change. The next full accreditation site visit is scheduled for 2023.

Congratulations on maintaining accreditation. On behalf of the evaluation committee, thank you for the courtesy and hospitality shown during the site visit. If you have any questions, or if we may be of assistance in the preparation of your next report, please do not hesitate to contact us at 800-248-2862 or Ms. Julie Horvath ([jhorvath@avma.org](mailto:jhorvath@avma.org); ext. 6624).

Sincerely,

*Rachel Valentine, RVT*

Rachel A. Valentine, RVT, BS  
Assistant Director  
[rvalentine@avma.org](mailto:rvalentine@avma.org); ext. 6676

*Laura Lien, CVT, VTS (LAIM) MS*

Laura Lien, CVT, VTS (LAIM), MS  
Assistant Director  
[llien@avma.org](mailto:llien@avma.org); ext. 6609

*AVMA Center for Veterinary Medical Accreditation*

RAV/LLL/jah

cc: Dr. Ann Bieber, President - Lehigh Carbon Community College  
Dr. Mark Erickson, President – Northampton Community College

<b>Lehigh Carbon &amp; Northampton Community Colleges ROE 2017</b>		(Office use only)
<p><b>CRITICAL DEFICIENCY (IES)</b>            Critical deficiencies apply to situations that clearly result in a program's inability to meet a Standard, and/or subject students, faculty, or others to unacceptable levels of risk. Documentation of significant progress toward compliance with each critical deficiency must be achieved by the time of the program's next report to CVTEA. Lack of compliance may be considered cause for reduction of the program's accreditation status.</p> <p>It is critical that:</p>		Is the Deficiency met with no further reporting required or unmet with continued reporting required?  (comments); date
1.	The Program's cattle chute be safe for students and personnel and emulate contemporary veterinary facilities and equipment. (4b, 4e)	Met; 11/2017
2.	The Program be compliant with Occupational Safety and Health Administration (OSHA) and other safety considerations with respect to: <ol style="list-style-type: none"> <li>labeling of secondary containers (spray bottles)</li> <li>availability of an eyewash station in microbiology laboratory at NCC and in the LCCC darkroom</li> <li>personal protective requirements when handling urine, fecal, and microbiology specimens</li> <li>location of the controlled substance cabinet. (4e)</li> </ol>	Met; 11/2017
3.	Equine radiographic exposures be logged in a radiology logbook in order to track exposures and in keeping with contemporary veterinary practices. (4e, 5d)	Unmet; submit copies of completed radiology logbook with entries
4.	Materials used for demonstration purposes, including those that are outdated, be appropriately identified and stored. (4f)	Met; 11/2017
5.	Documentation of essential skills indicate the complete date and year that each skill was assessed. (10e)	Met; 11/2017

<b>Lehigh Carbon &amp; Northampton Community Colleges ROE 2017</b>		(Office use only)
<p><b>MAJOR DEFICIENCY (IES)</b>  Major deficiencies apply to situations that jeopardize the ability of the program to meet a Standard. Progress toward meeting each major deficiency must be demonstrated on an annual or biennial basis. Documentation of steps taken toward compliance with major deficiencies is required. Lack of compliance within the assigned five- or six-year period, prior to the next scheduled complete evaluation, may be considered cause for reduction of the program's accreditation status.</p> <p>It is required that:</p>		<p>Is the Deficiency met with no further reporting required or unmet with continued reporting required?   (comments); date</p>
1.	The building project be completed as planned to provide facilities more suitable to Program needs. (4a, 4b)	Unmet; provide an update on facilities building project
2.	The Program have adequate space for storage. (4a)	Met; 11/2017
3.	IACUC-approved animal care and use protocols contain comprehensive description of procedures and plans for addressing preoperative and postoperative care. (5a)	Met; 11/2017
4.	Medical records be comprehensive and consistent with contemporary veterinary practice standards. (5d)	Met; 11/2017
5.	The controlled substance, radiology, and surgery logbooks include a roster or legend to identify personnel making entries in the logs in order to emulate best veterinary practice standards. (5d)	Met; 11/2017

## Curriculum

### VETERINARY TECHNICIAN



NCC's veterinary technician program is a joint collaboration with Lehigh Carbon Community College (LCCC) and is accredited by the American Veterinary Medical Association. In addition to completing science courses and labs at NCC's Bethlehem Campus, students take part in on-site clinical training at LCCC's veterinary technician barn, where hands-on experience includes working with animals both large and small, and both domestic and exotic. Students develop the latest techniques and skills while working with industry professionals to properly diagnose and treat animals that need a general checkup, are suffering from any variety of ailments, or may need a surgical procedure.

Graduates of the program are able to safely demonstrate proficiency in engaging in medical, surgical, and anesthetic nursing. As with any medical field, competence in dealing with client relations and communication is also a big part of completion of the program. Dealing with a pet owner is akin to dealing with the family of a human medical patient, and students are expected to demonstrate compassion while utilizing veterinary concepts.



#### YOUR CAREER AS A VETERINARY TECHNICIAN

Graduates of the program can expect to find jobs as Veterinary Technicians, in biologic research labs, as Lab Animal Technicians, in small and large animal practices, in exotics and specialty practices, at zoos, with wildlife rehabilitation centers, and with pharmaceutical companies, teaching institutes, diagnostic labs, aquariums, animal shelters, and animal feed companies.

Veterinary Technicians perform many of the same tasks for veterinarians that nurses and other professionals perform for physicians. These tasks include general animal care, surgical assistance, laboratory tests, x-rays, anesthesia, and critical care.

**Degrees We Offer:** Associate in Applied Science | 2 years



#### VETERINARY TECHNICIAN CAREER PATHS

- Veterinary Technician
- Biologic Research Labs
- Lab Animal Technician
- Small Animal Practice
- Large Animal Practice
- Exotics and Specialty Practices
- Zoos
- Wildlife Rehabilitation Centers
- Pharmaceutical Companies
- Teaching Institutes
- Diagnostic Labs
- Aquariums
- Animal Shelters
- Animal Feed Companies

For more information, please visit  
[northampton.edu/veterinary-technician](http://northampton.edu/veterinary-technician)

Northampton Community College does not discriminate on the basis of race, color, national origin, sex, gender identity, disability or age in its programs or activities.

For detailed information on this program including curriculum go to [northampton.edu/veterinary-technician](http://northampton.edu/veterinary-technician)

## Budget

### ACADEMIC AUDIT FINANCIAL DATA 2016-17

#### Veterinary Technician Degree

	FY2017	FY2016	FY2015	FY2014	FY2013
<b>Program Income</b>					
Tuition	140,042	176,073	162,562	152,374	140,331
Local Reimb	22,977	28,275	26,385	24,550	22,877
Operating Reimb	52,847	51,523	45,697	43,215	53,070
Stipend Reimb	-	42,183	40,126	29,225	-
<b>Total Income</b>	215,866	298,054	274,770	249,364	216,278
<b>Program Costs</b>					
Direct Costs	204,928	167,661	168,410	152,158	154,955
Indirect Costs	94,306	115,750	107,288	94,984	88,846
<b>Total Costs</b>	299,234	283,411	275,698	247,142	243,801
<b>FTE</b>	29.64	37.76	36.34	35.48	35.69
<b>Income per FTE</b>	7,283	7,893	7,561	7,028	6,060
<b>Cost per FTE</b>	10,095	7,505	7,586	6,966	6,831
<b>Inst Avg Cost per FTE</b>	6,703	6,416	6,144	5,730	5,430
<b>Rank</b>	11 of 132	37 of 129	25 of 119	26 of 122	21 of 120



## Appendix D

Veterinary Technician	Aug. '11	Aug. '12	Aug. '13	Aug. '14	Aug. '15	Aug. '16
	Dec. '11	Dec. '12	Dec. '13	Dec. '14	Dec. '15	Dec. '16
	May '12	May '13	May '14	May '15	May '16	May '17
# of Graduates	15	11	14	14	17	
employed	10	8	13	8	13	
job hunting	0	0	0	0	0	
continuing ed.	2	1	0	1	1	
other	3	2	1	5	3	
Employed Graduates	10	8	13	8	13	
Additional Data Not Avail.	—	—	—	—	—	—
related	9	8	12	8	12	
unrelated	1	0	1	0	1	
unrelated by choice	0	0	0	0	0	
Median starting salary (if>2 reported)	\$12.00	—	\$10.00	\$12.00	\$14.25	