Cornell

Center for Veterinary Business and Entrepreneurship





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Cornell Center for Veterinary Business and Entrepreneurship Mission

Our center's mission is to lead innovative education, research and outreach initiatives to identify, develop and promote best practices in business management to improve animal and human health.

About

The College of Veterinary Medicine partnered with the Cornell University SC Johnson College of Business in 2019 to establish the Center for Veterinary Business and Entrepreneurship. The center strategically recruited three core faculty members with expertise in business management and economics to focus on the scholarship and advancement of veterinary business as a discipline. In addition, the center expands the breadth and depth of its expertise through cross-campus collaborations with faculty, disciplines and programs sharing similar interests.

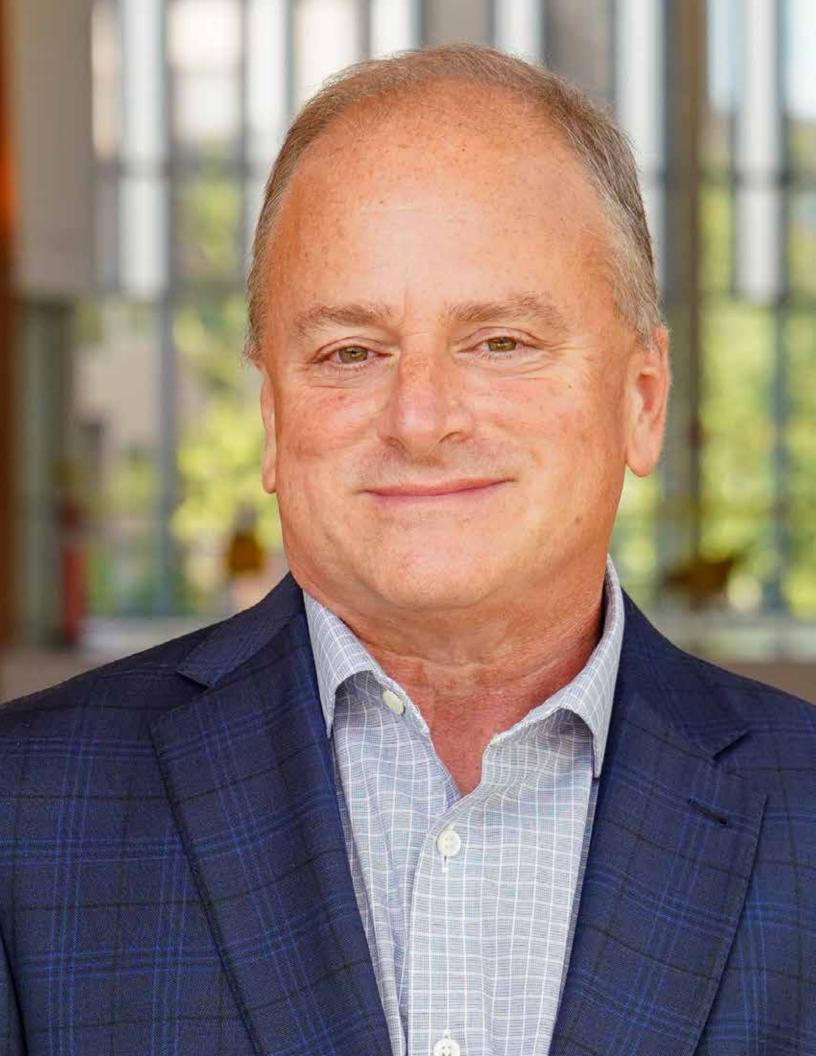
The CVBE is organized around four strategic areas: Education, Economic Research, Entrepreneurship and Intrapreneurship

The center collaborates with industry partners and our alumni network to extend our impact. We leverage guest lecture series, career advising and externships to provide students with a real-world perspective and experience in veterinary business. Collaborations on data acquisition and analysis support economic research, resulting in publications that improve animal and human health.

Health and Safety

We care about the health and safety of our students, staff and faculty. Photos of students used in this report are from pre-pandemic events. To learn more about Cornell's COVID-19 response, visit covid.cornell.edu





Letter from the Director



It is unlikely that the practice of veterinary medicine will ever be quite the same again.

The College of Veterinary Medicine's bold vision for a center to advance veterinary business and entrepreneurship proved as timely as it was insightful during the CVBE's inaugural year. Our new team has been able to work together to analyze, characterize and help formulate solutions for a profession in tremendous flux. While the impact of COVID-19 on the profession and society is staggering, it has also been a tremendous catalyst for change. It is unlikely that the practice of veterinary medicine will ever be quite the same again. Those willing and able to see opportunity amidst this chaos will usher in a new era for the delivery of veterinary care. The CVBE is committed to helping lead that charge by preparing veterinarians for a rapidly evolving marketplace, identifying trends early and helping effect real change through innovation and entrepreneurship.

The power of the CVBE comes from its people. Our three new, full-time CVBE faculty — Drs. Clinton Neill, Jorge Colón '92, D.V.M. '95, and myself — jumped at the opportunity to move to Ithaca, even amid a pandemic, to contribute to the only center of its kind among colleges of veterinary medicine. Our diverse knowledge, experience and interests synergize well with the skills of our extended team, which includes Drs. Meg Thompson and Jodi Korich, D.V.M. '97. We have since added two postdoctoral researchers and a research associate to the team, further enhancing our ability to address rapidly emerging issues in the profession.

The mission and vision of the CVBE would not be possible without the generous support of corporate partners who share our goals to advance animal health through improved business education, discovery and innovation. We look to our partners to help inform us on emerging trends in the profession and work together to seek creative solutions for the benefit of animal health. Our partners represent some of the most successful veterinary practices in the country and global leaders in the pharmaceutical industry and diagnostic services. We are united in the shared belief that providing outstanding veterinary care can only occur in an economically sound, market-focused, people-centric, nimble and innovative profession.

Many thanks to everyone who helped make the CVBE's inaugural year such a resounding success. We look forward to a profession with unprecedented opportunities for those with the skills, passion, and information to change the way we care for animals.

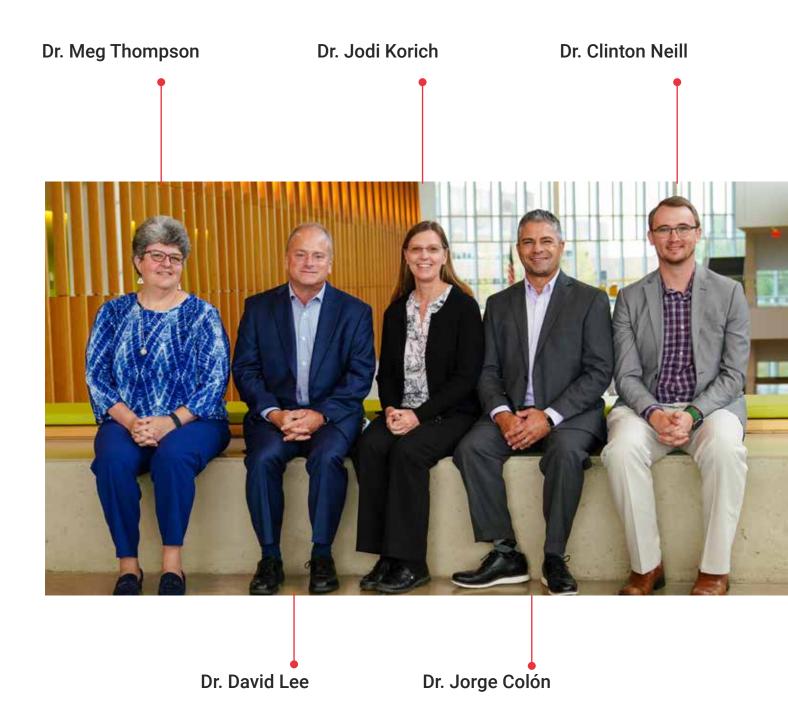


Dr. David Lee
Director of the Center for Veterinary
Business and Entreprenurship

Left: Lee at the College of Veterinary Medicine. Photo: Carol Jennings/CVM This page: Lee with his dog Rico. Photo provided.



The CVBE Leadership Team



The power of the CVBE comes from its people.



Dr. David Lee
Associate Dean for External Programs
Director of the Center for Veterinary Business and Entrepreneurship

David Lee '88, D.V.M. '94, M.B.A. '99, is a proud alumnus of Cornell and returned to his alma mater in 2020 to serve as a faculty member at the College of Veterinary Medicine and as the associate dean for external programs. He provides oversight for the CVBE as well as the Cornell Margaret and Richard Riney Canine Health Center, in addition to teaching and expanding the CVBE's course offerings for veterinary students, other degree programs and growing external audiences.

Before returning to Cornell, he was the hospital director at the University of Minnesota College of Veterinary Medicine. He held a faculty position as associate professor of veterinary practice management and served as director of career development. In 2018, Lee was inducted into the UMN Academic Health Center's Academy for Excellence for Health Care Practice for the successful design and implementation of pet wellness plans in a teaching hospital setting. He also served as interim chair of their Department of Veterinary Clinical Sciences. From 2003 to 2006, Lee served as hospital director at Colorado State University.



Congratulations to
Jorge Colón '92, D.V.M. '95, on
receiving the 2021 Innovative
Teaching Award from the
Department of
Clinical Sciences!

Dr. Jorge Colón Associate Professor of Practice in Financial and Organizational Management

Jorge Colón '92, D.V.M. '95, joined the Center for Veterinary Business and Entrepreneurship in February 2020 as the center's associate professor of practice in financial and organizational management. In this position, Colón leads a new program that incorporates financial and organizational management competencies into college curricula. He designs and delivers interactive learning experiences in existing core courses as well as developing new courses, including a new Certificate of Veterinary Business Management. In addition to collaborating with a variety of stakeholders — including faculty at the College of Veterinary Medicine and across Cornell, in industry, start-up businesses and with alumni — Colón helps students develop an innovative, creative mindset and equips them with professional competencies for a lifetime of career success.

Colón is a Cornell alumnus who earned his bachelor's in biology in 1992 and his D.V.M. in 1995. After graduation, he completed an internship at a major equine hospital in Lexington, Kentucky, and subsequently opened his own private equine ambulatory practice that specialized in reproduction, neonatology and radiology. He earned his M.B.A. from Colorado State University in 2015, and, after many successful years in practice, returned to Cornell to share his knowledge and experience through the new Center for Veterinary Business and Entrepreneurship.





Dr. Clinton Neill

Assistant Professor of Veterinary Economics and Management

Dr. Clinton Neill is currently an assistant professor in veterinary economics for the Cornell Center for Veterinary Business and Entrepreneurship. Neill's research primarily focuses on the broad scope of issues that face the veterinary industry. He also has grant-funded research projects in food policy, labeling and the integration of producer and consumer decision-making. Before coming to Cornell, Neill was an assistant professor in food systems economics at Virginia Tech. He completed his bachelor's and master's degrees in agricultural and applied economics at Texas Tech University and received his doctorate in agricultural economics from Oklahoma State University. In addition to his research, Neill focuses on bringing his academic research to real solutions for the veterinary and food industries.



Dr. Jodi Korich Associate Dean for Education Associate Clinical Professor

Jodi Korich, D.V.M. '97, serves as the associate dean for education, providing oversight for the college's educational degree programs, continuing education conferences and online course catalog, Cornell Pre-college Studies Program and the Educational Support Services team. She is also a founding member of the Cornell Center for Veterinary Business and Entrepreneurship, where she contributes her knowledge of curricular design, evidence-based instructional methodologies and educational technologies to support the center's educational mission.

In her various roles, Korich works in close partnership with college administration, faculty and staff to provide vision and leadership to ensure excellence in our educational programs. Korich comes to the College of Veterinary Medicine from Texas A&M University, where she was the founding director of the Center for Educational Technologies and clinical associate professor in the College of Veterinary Medicine & Biomedical Sciences. Korich received her bachelor's in biology with honors from Vassar College in 1991 and her D.V.M. from Cornell in 1997. After earning her D.V.M. at Cornell, she spent five years in clinical practice in Fairfax, Virginia, and then returned to Cornell 2002 through 2010 as an instructor and senior extension associate in the Department of Clinical Sciences. In 2017, Korich joined the college's leadership team, eager to assist in achieving the college's goals of enhancing curricula and meeting the evolving needs of students, the profession and society.



Dr. Meg Thompson
Associate Dean of Hospital Operations
Director of the Cornell University Hospital for Animals

A member of the Cornell faculty since 2006, Dr. Meg Thompson earned her D.V.M. degree from the Tufts University School of Veterinary Medicine and completed her clinical training at Angell Memorial Animal Hospital and the University of Florida. She is a diplomate of the American College of Veterinary Radiology.

Thompson's clinical and business interests include informatics and emerging veterinary information technology, education technology, entrepreneurship and small animal abdominal ultrasound.



Dr. Benjamin Blemings
Postdoctoral Associate

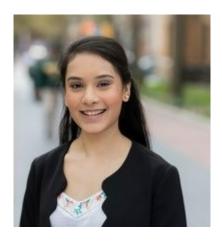
Dr. Benjamin Blemings received his Ph.D. in economics from West Virginia University in 2021. He is an applied microeconomist, using causal inference methods and unwieldy datasets to study education, health, labor and crime. His work for the CVBE has focused on the effects of private equity acquisitions of veterinary practices and the effects of the USDA's Veterinarian Loan Repayment Program. Blemings enjoys playing soccer and training his dog, Bruno.



Dr. Peilu Zhang
Postdoctoral Associate

Dr. Peilu Zhang is a postdoctoral associate in the Center for Veterinary Business and Entrepreneurship. Peilu received her Ph.D. in agricultural economics from Texas A&M University. Her primary research field is behavioral and experimental economics, with particular interests in veterinary economics, preference elicitations and gender differences. Zhang's research focuses on understanding behavioral aspects of decision-making by designing and conducting experiments. She aims to design novel 'nudges' to help people make better decisions and improve their quality of life. She also incorporates biometric process-data, like eye tracking and facial expressions, into economic models to uncover hidden information behind decision-making.





Taarini Gupta Research Associate

Taarini Gupta joined the CVBE in October of 2021 as a research associate. She has five years of experience conducting psychological and behavioral research and extensive knowledge in the application of behavioral science concepts to social, organizational and political structures. She also works as a consultant for a study and implementation team at a market research firm, where her background in behavioral science research allows the application of social and behavioral science theories and design for the development of test stimuli. Gupta's keen understanding of human behaviors and habits helps her facilitate the design, launch and analysis of the data to uncover relevant motivational insights. She has clients across multiple industries, like pharmaceuticals, human healthcare and animal health, and has served as a mentor for students at Cornell for the annual Animal Health Hackathon. Gupta holds a master's degree in behavioral and decision sciences from the University of Pennsylvania and a bachelor's degree in psychology.



Dr. Sam Morello Courtesy Associate Professor

Sam Morello '02, D.V.M. '06, is a two-time graduate of Cornell. She joined the Center for Veterinary Business and Entrepreneurship in November of 2021 as a courtesy associate professor through the Department of Clinical Sciences.

Morello currently presides as the assistant director for continuing education for the American College of Veterinary Surgeons. She is also a member of the AOVet North America Faculty, leading a task force on faculty and leader development on the Education Committee for the internationally AO Access program.

Her primary research and outreach focus is on gender in veterinary medicine and how the feminization of the labor market presents a unique challenge and opportunity for veterinary medicine. She will also focus on professional sustainability and how to improve compensation, career advancement and workplace value for veterinarians and trainees. Her goals are to provide data to improve mentorship, inform career decisions and guide those in management and leadership roles to shape the policies that best serve the profession.

Education

Our strategic goal is to have all veterinary students graduate with core business education. We have divided a significant list of activities related to the competencies within Domain 8, regarding financial and organizational management, and within that domain we have core and prerequisite courses. We also developed a list of activities that will address each of these competencies, either by implementing them within existing courses or by creating new courses. Activities to satisfy the different competencies were developed and categorized based on milestones. Core 1 and Advanced Core are activities that we believe should form part of the core curriculum. Distribution activities are elective level courses for a veterinary student who would like to go deeper into an area.



Jorge Colón '92, D.V.M. '95

"This last year has been one of remarkable progress for the formation of the veterinary business education program. Development of a framework of educational activities that support established financial and organizational management competencies has allowed us create and deliver a roster of courses that is quickly helping us better prepare our students for a lifetime of career success. Course enrollment numbers and student feedback are highly suggestive of favorable results thus far."

Core 1 and Advanced Core

Jorge Colón '92, D.V.M. '95, associate professor of practice in financial and organizational management, has created a curriculum proposal that will be presented to the curriculum committee. It proposes the incorporation of Core and Advanced Core activities into sections of foundation courses within the existing curriculum. At the same time, he has developed a framework for elective distribution courses based on a roadmap that students can follow throughout the curriculum. The intent is to create a Certificate of Veterinary Business Management that can be recognized as part of the student's transcript. All veterinary students would be exposed to the Core 1 and Advanced Core concepts, and any student can take electives for further business training, but only those students who complete a specific framework of distribution courses would achieve the certificate.

Market Analysis

Dr. Clinton Neill will lead a non-classroom course related to market analysis. This will likely involve a student working on a market research project with a network partner under Neill's supervision during their summer break. We will also develop a 'Part B' component that involves outreach education on a specific subject.

Animal Health Hackathon

The Animal Health Hackathon is an independent activity but acts as a living laboratory for the "Agile Innovation" course, which is done in collaboration with the SC Johnson School of Management.

Teaching

Our curriculum includes seven courses that deliver real-life education to students in a conversational way, versus only lecturing and incorporating an asynchronous component of teaching. Faculty will continue to utilize asynchronous content to supplement in person teaching in the coming years.

External Opportunities

We have created opportunity blocks for third- and fourthyear students, which are detailed, rigorous two-week educational opportunities for experiential learning and summer opportunities for students interested in veterinary and veterinary business externship experiences.

Diversity, Equity and Inclusion

We are always looking to increase diversity, equity and inclusion in our programs as an opportunity for students to see the importance of diversity, creativity and of having different opinions and perspectives within a working group.



Domain 8

Financial and Organizational Management

The graduate demonstrates personal and professional financial literacy and contributes to sustainable and productive organizations.

COMPETENCY	SUB-COMPETENCIES
8.1 Applies sound financial principles to personal and professional life	8.1.1 Negotiates agreements and contracts to ensure fair outcomes 8.1.2 Develops and follows a budget for self, unit, organization or business 8.1.3
	8.1.3 Develops a plan to effectively manage debt 8.1.4 Analyzes financial implications when making operational decisions
8.2 Delivers veterinary services compliant with legal and regulatory requirements	8.2.1 Develops and maintains the veterinarian-client-patient relationship 8.2.2 Understands and complies with local and federal laws and regulations 8.2.3 Demonstrates an understanding of the role of federal regulatory oversight agencies to veterinary medicine
8.3 Advocates for health and safety of patients, clients and members of team within the workplace	8.3.1 Identifies and complies with veterinary workplace guidelines, regulations and responsibilities 8.3.2 Promotes safe handling, use and display of veterinary products
8.4 Utilizes business methodologies, tools and other resources to create, monitor and manage financial performance	8.4.1 Tracks the performance of a unit, organization or business 8.4.2 Evaluates data and outcomes to actively manage the performance of a unit, organization or business
8.5 Creates and/or contributes to operations that strengthen the organization	8.5.1 Utilizes operational goals to implement standard operating procedures and quality and performance improvement programs 8.5.2 Contributes to sales, marketing and outreach efforts to support the unit, organization or business enterprise 8.5.3 Embraces and adapts to changes in emerging technologies and service models

Current Distribution Courses for Spring 2022

8 credit hours

Agile Innovation

The course is designed to complement the Animal Health Hackathon and will focus on the challenges and opportunities related to animal health entrepreneurship and innovation.

Managerial Accounting and Lean Inventory Management

The course teaches essential concepts of managerial accounting and lean inventory management within the veterinary business space to help develop strategy toward the managerial decision-making process.

Veterinary Business Economics

Basic economic concepts and their application to realworld veterinary business scenarios will be defined and explored to help make and use data as a tool for economic problem identification and decision-making.

Personal Finance

The course will examine and facilitate the acquisition of essential financial skills regarding personal debt management, budgeting and savings, with an emphasis in the formulation of financial decision-making strategies that effectively utilize the attained financial competence to increase the student's level of financial literacy.

Service Marketing

The course explores essential concepts of service marketing, with an emphasis on developing customer service skills that lead to customer satisfaction and promote business success and growth, by exploring quality improvement processes and strategies to maintain high quality of service.

Practice Ownership & Management

We will explore practice ownership models and pathways together with techniques for financial and organizational management and operational efficiency. This will prepare graduates interested in business ownership for their professional careers.

ePortfolio

The course will facilitate the creation of an electronic portfolio as a tool that documents their personal and professional development through the veterinary educational curriculum and serves as a source of professional and personal differentiation. The ePortfolio will document the student's four-year personal and professional development as supported by reflections on key knowledge and skills acquired through specific curriculum courses, demonstration of competencies and sub-competencies achieved under the curriculum framework, applied practical experience obtained through internal and external opportunities, integrated experiential learning achieved through research collaborations, as well as self-assessment of developmental achievements, all through an electronic format that visually represents their professional self.



Proposed Veterinary Business Management Certificate

8-10 credit hours



Xander Casad, D.V.M. '20 Small Animal General Practitioner Orlando, Florida

"I successfully used the skills you taught us in your veterinary business distributions to convince my new boss to buy an ultrasound for our practice. I was quickly labeled 'the business guy' at my practice, and the owners started consulting me about various other equipment purchases. I was involved in revising various aspects of the clinic inventory and pricing structure, and in exchange for my extra efforts I was compensated with multiple raises and additional profit sharing within my first year of practice."

- 1. Agile Innovation and Animal Health Hackathon
- 2. Personal Finance
- 3. Leadership, Communication and People Management
- 4. Service Marketing
- 5. Business Model Generation for New Ventures
- 6. Market Analysis for New Discoveries
- 7. Managerial Accounting and Lean Inventory Management
- 8. Practice Ownership and Management
- 9. Capstone Special Project
- 10. ePortfolio



Research

The center is committed to advancing animal health through research in veterinary economics, providing an evidence-based foundation for veterinary practice management, industry and veterinary teaching programs. Research on market trends in veterinary medicine is conducted to identify successful and emerging business models and best management practices for the profession.



Dr. Clinton Neill

"Our research team at the CVBE pursued a range of vital questions in the last year, from emerging issues around telehealth to persistent concerns like burnout. What we're finding will lay the groundwork for solutions that support individuals and businesses alike, with an eye toward sustainable, long-term benefits that advance the field at large."

Dr. Clinton Neill, assistant professor in veterinary economics, is overseeing two postdoctoral associates within the CVBE, Drs. Benjamin Blemings and Peilu Zhang. Neill is also overseeing Taarini Gupta, who joined the CVBE Oct. 1, 2021, as a research associate. This position is sponsored by Mind Genomics Advisors (MGA) and will involve projects related to the partnership between MGA and the CVBE. In addition, Gupta will be working on behavioral science and economic related projects in conjunction with Neill and the CVBE.

Current and Upcoming Research

Research coming out of the CVBE is exciting and varied. Here are a few highlights of what we've been working on and what's in store.

AVMA/Zoetis funded grant on Organizational Interventions to Alleviate Burnout among Veterinarians

In collaboration with Dr. Sunita Sah in the SC Johnson School of Management this study is setting out to test potential organizational level interventions to address burnout in veterinarians. Organizational interventions have shown to be more effective than individual level actions in alleviating work place stress and reducing burnout. This study will perform a randomized control trial with clinics to test an organizational intervention that focuses on teamwork, communication, and increasing psychological safety of veterinary teams through training modules. In addition, the study will test if individual level interventions in combination with organizational actions have a compounding effect on burnout and other related outcomes such as turnover, job satisfaction, revenue, among others.

Economic Cost of Burnout

This study examines the economic cost of burnout in the profession — looking at the industry as a whole while also dividing it by veterinary role.

Gender Wage gaps in Veterinary Medicine

The first overarching study of the gender wage gap in veterinary medicine, Neill and his collaborators examined practice ownership income, experience, and specialty certification and found that women veterinarians make less than their men counterparts. Overall, the disparity predominantly affects recent graduates and the top half of earners. For the top quarter of earners, the annual difference is approximately \$100,000. Similar to what's been found in the human medicine world, they found the wage gap was more prominent in the beginning of their careers but dissipates after about 25 years.

Payment Plans in Clinics

Payment plans may prove to be a means of increasing access to care for low-income pet owners, as well as clients who may not be able to pay in full at the time of service. This grant, provided by Maddie's® Fund, enables us to assess the financial feasibility of payment plans in clinics.

Telehealth Technologies in Veterinary Medicine

Supported by a grant from the American Veterinary Medicine Association, we are exploring the current use and identification of barriers to using telehealth technologies in veterinary medicine.

RESEARCH CONTINUED ON NEXT PAGE



Research

USDA grant on rural veterinary businesses

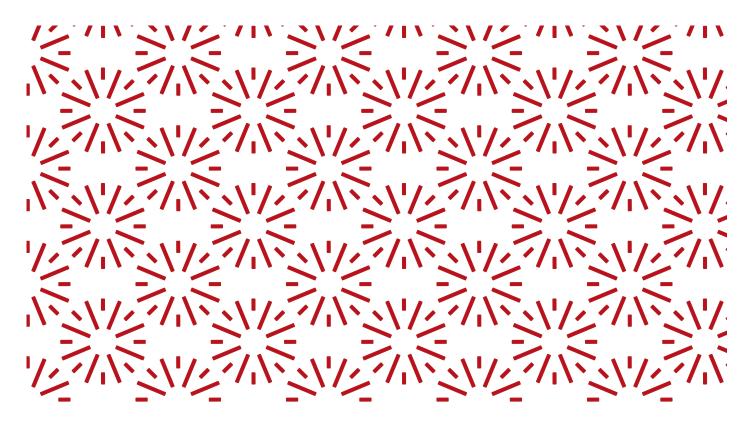
The focus of this work is to delve deeper into rural veterinary practices, their importance to rural communities and the effects of government policies to encourage more veterinarians to locate in these areas. This study will evaluate the economic activity supported by rural veterinarians through Industry Contribution Analysis (ICA), analyze the competitiveness, areas of shortage, and labor/employment of rural veterinary businesses, survey the impacts of adoption of veterinary informatics and broadband technologies on individual firm's market competitiveness, and survey of prices and consumer willingness-to-pay for companion animal veterinary services in rural versus urban areas.

Veterinary Student Willingness to Accept Job Offer Benefits

This study will help determine the relative value of various aspects of veterinary positions from the viewpoint of new graduates, with the goal of better matching applicants with their ideal job.

Other Projects

- The effects of mergers and acquisitions on hospital revenue and jobs
- A potential veterinarian shortage
- The effects of the Veterinary Medicine Loan Repayment Program on rural veterinary business entry
- · Vocation choice for veterinary students
- · Consumer willingness to purchase premium companion animal food
- · And more



Entrepreneurship & Intraprenuership

In February of 2021, we held the fifth annual Animal Health Hackathon, which hosted 113 student participants, 21 teams, 52 mentors and 15 speakers. Several Cornell colleges and other institutions were represented, including Colorado State University, North Carolina State University, Tufts University and Tuskegee University.

2021 Hackathon Winners

- Best Market-Ready Solution: Beetle Bulb, which prevents invasive beetles from decimating domestic beehives
- Most Innovative Solution: Here for the Vibes, which creates bandages that help animals heal faster
- Best Veterinary Healthcare Solution: Pawsitive, an application which helps pets and pet owners combat separation anxiety



2022 Events

Animal Health Hackathon

February 4-6, 2022

Disruptive innovation is the creation of new markets and discovery of new customers through the use of new technology or a new use of old technology.

Co-hosted by the College of Veterinary Medicine, the Center for Veterinary Business and Entrepreneurship, and Entrepreneurship at Cornell, this event brings together participants from diverse majors, schools and institutions to address current needs in veterinary health care.



CVBE Spark Talks

Launched April 19th, 2022

The CVBE is piloting three one-hour monthly online lectures starting April 19, 2022 with Cornell experts discussing trends and best practices from other industries with the goal of sparking new ideas to advance veterinary businesses. All veterinarians, practice owners, and industry leaders are invited to attend. After a brief summer hiatus, the CVBE Spark Talks will return in Fall 2022.

CVBE Summit

November 10-11, 2022

The CVBE is organizing a unique summit for June of 2022, in combination with our colleagues at the SC Johnson College of Business and the Cornell School of Industrial and Labor Relations.

While concerns of burnout and turnover in the profession are the drivers for this summit, the program will focus on increasing the social as well as economic returns of a career in veterinary medicine, with the goal of helping veterinarians realize the careers they dreamed of most of their lives.

To do this, we will be turning to our experts to help present the latest research, best practices and innovations from other industries. We will be limiting the number of attendees to this event to allow access to presenters and breakout sessions, as well as the development of action items with online follow-up to assess and report progress.



Photos on 12 and 13 of the January 2020 Animal Health Hackathon: Rachel Philipson/CVM

Thank you to our corporate partners for their generous support.

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