IOWA STATE UNIVERSITY

College of Veterinary Medicine

◈TRAINING THE NEXT GENERATION OF VETERINARIANS AND SCIENTISTS◈

◈ANSWERING IMPORTANT ANIMAL AND HUMAN HEALTH QUESTIONS◈

◈SERVING THE PEOPLE OF IOWA AND BEYOND WITH INNOVATION IN MEDICINE AND DIAGNOSTICS◈

Reappointment Self-Assessment

Dan Grooms
Stephen G. Juelsgaard Dean of Veterinary Medicine
April 3, 2023

Executive Summary

As articulated in our college mission statement, our overarching goals are to train the next generation of veterinarians and scientists, answer important animal and human health questions, and serve the people of Iowa and beyond with cutting edge medicine and diagnostics.

"The College of Veterinary Medicine at Iowa State University is dedicated to enhancing the health and well-being of animals and humans through excellence in education, research, professional practice, and committed service to the State of Iowa, the nation, and the world."

The Iowa State University College of Veterinary Medicine (ISU CVM) ranks in the upper 30% of all colleges/schools of veterinary medicine nationally (#9 compared to 15 in 2018) and internationally (#16 compared to #40 in 2018) as reported by the 2023 QS World University Rankings. We attract applicants from all over the US and globally. The number of applicants to our program has increased by 70% since 2018. Our students are well prepared as evidenced by the NAVLE pass rate of 96% in 2021/2022 (90% nationally as reported by ICVA). Our research enterprise has continued to grow, increasing in total annual funding by approximately $6.4 million since 2018. In addition, our two primary outward facing service units that are integral to all three of our missions – the Lloyd Veterinary Medical Center and the Veterinary Diagnostic Laboratory – continue to grow and see record number of cases every year.

Process for Evaluation of the Dean of the ISU College of Veterinary Medicine

Section 4.2 of the ISU CVM Governance Document outlines the process for evaluation of the Dean. The Governance Council of the CVM serves as the elected group to evaluate the dean in consultation with the Provost. The review and evaluation procedure shall consist of a self–assessment by the Dean, which will be distributed to the College faculty after discussion and review with the Dean by the Evaluation Committee; evaluation of the performance of the Dean; and an Evaluation Committee assessment of the progress toward goals of the strategic plan. Input shall be solicited from ISU CVM faculty and staff; CVM professional and graduate students; administrative unit leaders in the ISU College of Veterinary Medicine and relevant UNL program representatives; and external stakeholders. A confidential Evaluation Committee report on their review and evaluation of the performance of the Dean shall be provided to the Provost, discussed with the Dean and the Provost, and held in the Dean's personnel file.

IOWA STATE UNIVERSITY
College of Veterinary Medicine

MISSION

The Iowa State University College of Veterinary Medicine is dedicated to the enhancement of the health and well-being of animals and human beings through excellence in education, research, professional practice and committed service to the State of Iowa, the nation and the world.

VISION

The Iowa State University College of Veterinary Medicine aspires to be a preeminent institution recognized for excellence in professional and graduate education and the application of knowledge to promote animal and human health with significant influence on society's food supply, while providing a caring and supportive work environment.

CORE VALUES

Integrity • Excellence • Quality • Creativity and Innovation • Commitment • Positive Work Climate • Stewardship

COMMITMENT TO DIVERSITY

In recognition of the importance and value of diversity in everything we do, Iowa State University College of Veterinary Medicine is committed to actively promoting diversity and inclusion that embraces the value of the many areas of the veterinary medical profession, and the value of varied cultural backgrounds, ethnicities, gender, gender identity or expression, sexual orientations, ages, religions, physical and mental abilities of our students, faculty and staff.

College Leadership

Goal: To establish a diverse and dedicated leadership team that is well connected to central university administration.

Strengths: The CVM leadership team is diverse in multiple dimensions, including experience, gender, age, race, ethnicity, and professional background, and each brings a unique perspective and expertise that contributes to the college's ability to fulfil its mission.

Challenges: The majority (15/21) of the College leadership has transitioned since 2018 (Fig 1). This has created challenges with the loss of institutional knowledge, but also provides opportunities for innovation with new energy, ideas and perspectives.

Future Plans: The College is investing in current leadership and future leaders though a variety of leadership training opportunities. Examples of this include the ISU Emerging Leaders Academy, the AAVMC Leadership Academy, the Food Systems Leadership Institute (FSLI), and the Veterinary Leadership Experience. We are also evaluating and planning for the addition of leadership to support diversity, equity and inclusion initiatives.

Points of Pride: The leadership team is diverse in its make-up, adding to the richness of discussions and decision-making.

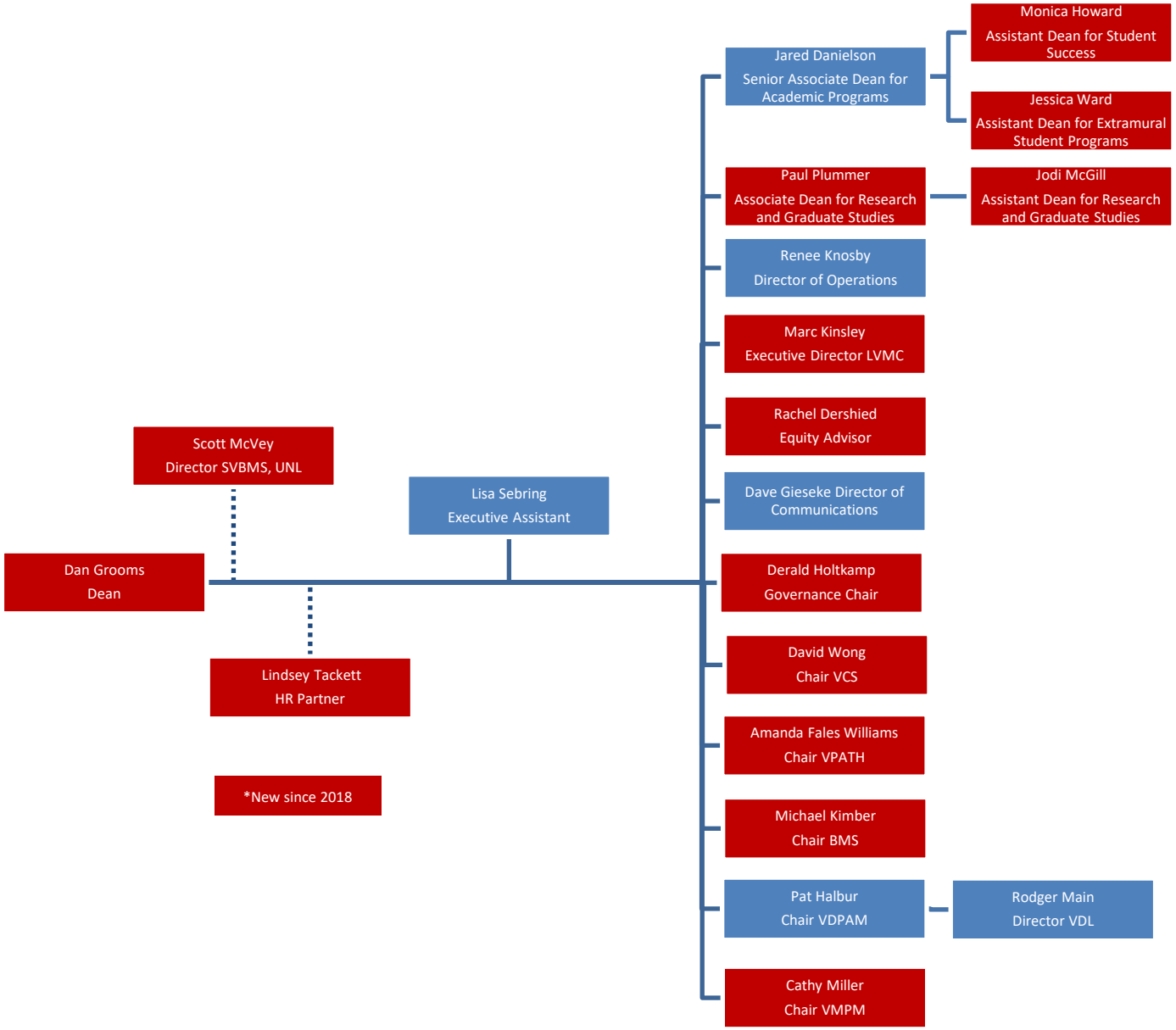

Figure 1: ISU CVM Leadership Team (04.01.23).

Finances

Goal: To be a fiscally responsible enterprise that minimizes the financial burden of our students.

Strengths: Since FY2018, ISU CVM expenditures have increased by ~17% while revenues have increased by ~25% (Table 1). There have been significant increases in revenue from the Lloyd Veterinary Medical Center (54.4%) and Veterinary Diagnostic Laboratory (45.8%). Our research enterprise funding has increased by 50% resulting in more indirect cost revenue to the College. Tuition revenues has increased by 20% (driven by both tuition and enrollment increase). The CVM endowment and gift income have grown by 180%. We have been able to maintain and, in some cases, grow programs. Examples include growth in our theriogenology teaching and research programs, increasing from 2.75 to 3.75 faculty FTE in 2020, growth in our Emergency and Critical Care program, increasing from 2 to 4 faculty FTE in 2023 and growth in diagnostic pathologists, increasing from 8 to 11 faculty FTE on 2022. Primary use of carryforward funds has been for facility maintenance and remodeling, and the College's commitment to the new VDL.

Table 1: Summary College Finances FY18 to FY2022

	Fiscal Year					%
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	change
Total Expenditures	$109,341,053	$112,365,440	$116,951,086	$125,009,524	$128,851,762	17.84%
Total Revenue	$111,616,694	$118,467,042	$118,952,533	$130,594,919	$140,351,107	25.7%

Challenges: Increases in costs for University Wide Services (increased $2.9 million since 2018) and decreasing state appropriations (decreased $715k since 2018) have put increasing pressure on other revenue sources including tuition, service unit revenues and foundation revenues

Future Plans: To identify opportunities to diversify and grow revenue streams to offset decreasing state appropriations and to minimize tuition increases. This would include continuing to grow our service units and looking at other revenue generation programs such as new graduate programs, undergraduate education partnerships, or life-long learning programs.

Points of Pride: Our total cost of education continues to be in the lower 1/3 for both resident and non-resident DVM students (Fig 2). The median debt of ISU CVM students who graduate with debt is $154,607. The average debt of students who graduate from all US CVM's with debt is $175,920. This is a testament to both our commitment to maintaining a relatively low cost of education and raising funds for scholarships to invest in our students and the future of our profession.

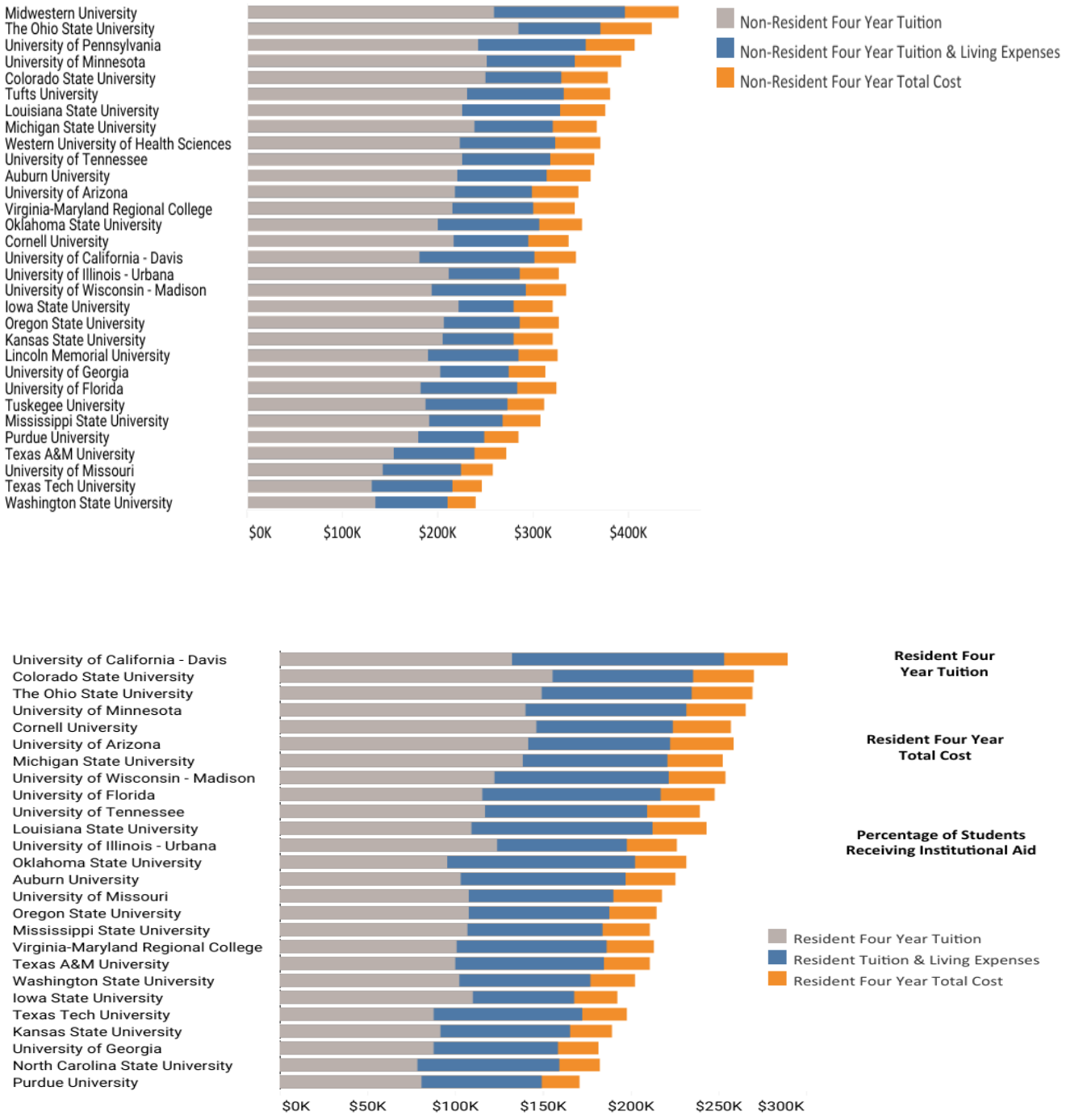

Figure 2: Non-resident and resident cost comparison of US colleges of veterinary medicine.
(Source: AAVMC)

Physical Facilities and Equipment

Goal: To have a functional and safe environment for employees to work in and our students to learn. Increasingly, we have focused on incorporating wellness in our spaces as we remodel or add new space.

Strengths: Our core academic facilities are approaching 50 years old. However, with continuous investments, these facilities and accompanying equipment continue to be functional and safe. When modernizing spaces, we have intentionally focused on incorporating "wellness" into the design, primarily through the addition of natural lighting. Major projects completed during the past 5 years include:

- Modernized AV/IT infrastructure of all of our classrooms and hospital rounds rooms, and most of our small teaching spaces.
- Renovation of Classroom 2532 was completed in 2020 to increase capacity and functionality.
- Renovation of the Veterinary Field Services building was completed in 2020, significantly upgrading our teaching, research and service capacity linked to the field service unit.
- The Fish Tank Lobby and adjacent areas were renovated in 2019/2020 to create a more welcoming entrance and additional common space for students, staff and faculty to gather.
- The Wilke Suites (small classrooms) were renovated in 2022, upgrading their appearance, AV/IT and bringing in more natural light into the spaces.
- Updated the anesthesia clinical space to create a more aesthetically pleasing space to work in.
- A new Veterinary Diagnostic Laboratory is under construction. This facility will serve as a foundation for ISU CVM to continue being a leader in providing state-of the art diagnostic service, teaching and research.

Challenges: Despite significant investments in upgrading facilities since 2018, additional improvements in key areas are important to support the college mission. To address these challenges, key planned facilities improvements include:

- Completion of the new Veterinary Diagnostic Laboratory phases I and II.
- Upgrading and adding more dedicated student educational, study and testing space.
- Upgrading and adding faculty and staff office space
- Additional high quality research space.

It is the college plan to address many of these items by remodeling the current Veterinary Diagnostic Laboratory space when new Veterinary Diagnostic Laboratory is completed.

Future Plans: To meet unmet needs, our strategy is to renovate existing facilities including the soon to be vacated Veterinary Diagnostic Laboratory as it is transitioned to the new facility. We are also exploring new spaces in the Lloyd Veterinary Medical Clinic to grow new programs including oncology, theriogenology and large animal rehabilitation.

Points of Pride: With all of our renovation projects, we have purposely emphasized wellness in the design. This includes comfortable/functional furniture, natural lighting, and design elements to add interest to spaces.

Faculty and Staff

Goal: To have a world class, diverse and engaged faculty and support staff.

Strength: Iowa State has long had and continues to have a world-class and dedicated faculty. They are recognized across the US and internationally for their expertise and excellence, especially in the broad discipline of livestock health. Our faculty is above average when it comes to diversity as reported to the AAVMC, and even more richly diverse when taking into account gender identification, age, geographical origination, ability, and other dimensions of diversity.

Challenges: Since 2018, faculty turnover has averaged 10% annually. Factors identified that contribute to this turnover include competition for talent by private non-academic organizations, compensation and life style.

Future Plans: To remain competitive for recruitment and retention of world class faculty and staff, we are implementing several strategies to increase salaries for key faculty and staff positions, piloting benefits to support financial obstacles unique to veterinarians (federal loan repayment), increasing job flexibility, supporting dual career partners, and working hard to create a caring community. These plans have reversed the trend of high faculty turnover for now (Table 2).

Table 2: Faculty turnover 2018-2023.

**Through April 1, 2023*

FY Year	Start	End	Lost	Gained	% lost
2018	156	154	12	10	0.08
2019	154	154	17	17	0.11
2020	154	149	16	11	0.10
2021	149	148	16	15	0.11
2022	148	152	9	13	0.06
*2023**	*152*		*5*	*8*	*0.03*

Points of Pride: Dr. Qijing Zhang, professor in VMPM, was elected to the National Academy of Sciences in 2022 and Dr. Amy Baker, affiliate professor in VMPM and scientist at USDA NADC, was elected to the National Academy of Medicine in 2020. Additionally, the following faculty have held leadership roles in professional organizations, further emphasizing the national reputation of our faculty:

- Qijing Zhang, President, 100th Annual Conference of Research Workers in Animal Diseases, 2020
- Mandy Fales-Williams, President Iowa Veterinary Medical Association, 2020-21
- Jonathan Mochel, President, Animal Health Modeling and Simulation Society, 2020-21
- Albert Jergens, President, Comparative Gastroenterology Society, 2020-21
- Dana LeVine, President, Association of Veterinary Hematology and Transfusion Medicine, 2020-21
- Danelle Bickett-Weddle, President, American College of Veterinary Preventive Medicine, 2020-21
- Pat Gorden, President, American Association of Bovine Practitioners, 2021-22
- Tim Day, President, Faculty Athletics Representative Association, 2022-2023
- Eric Burroughs, President, American Association of Veterinary Laboratory Diagnosticians, 2023-24
- Paul Plummer, Chairperson, Presidents Advisory Council on Combating Antibiotic-Resistant Bacteria, 2023-2024

Students

Goal: To have an engaged, diverse and supportive student body.

Strengths: The ISU CVM has an engaged and increasingly diverse student body. The students are highly invested in and partners in the college priorities of supporting wellness and diversity, equity and inclusion. Through their input, the college has invested in a variety of mental and physical health initiatives. They have been instrumental in driving facility changes such as increasing the number of gender-neutral bathrooms and upgrading the study spaces in the library. They are engaged in every aspect of the college missions from education (tutors), to service (student workers) to research (summer research programs).

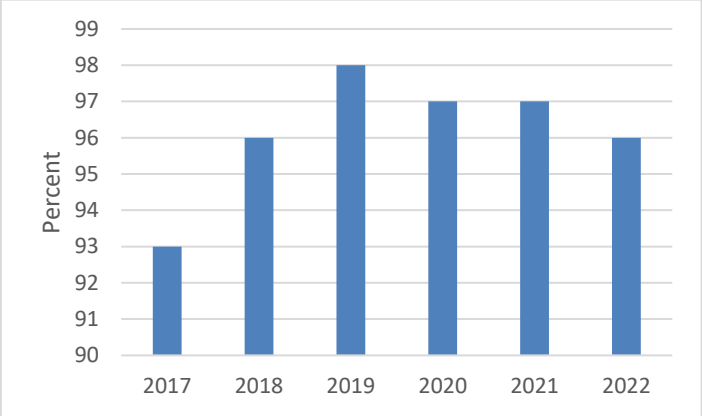

Figure 3: Percent of ISU CVM graduates with employment at graduation 2017-2022.

Our students are very successful as measured by several factors. For the past 6 years, job placement rates have been higher than 90% (Fig 3). Pass rate on the NAVLE boards has exceeded 95% during the same time-period.

Challenges: The CVM continues to build diversity within its student body. Growth in student diversity, as measured by AAVMC definitions of students underrepresented in veterinary medicine, has been slow but steady.

Student attrition has increased during the past two years (Table 3). The cause of this trend is unclear.

Table 3: Student attrition AY2012-23
*Fall semester only

Academic Yr	N	%
2012-13	7	1.4%
2013-14	8	1.6%
2014-15	14	2.8%
2015-16	11	2.2%
2016-17	10	1.9%
2017-18	15	2.9%
2018-19	15	2.9%
2019-20	8	1.3%
2020-21	12	1.9%
2021-22	22	3.4%
2022-23*	18	2.8%

Future Plans: We will continue to implement strategies to diversify our student body including developing undergraduate pipelines, increased recruitment, developing URVM experiential initiatives, evaluation of and adjustment of admissions criteria to remove barriers, and increased scholarships opportunities. We are reviewing all aspects that may affect student attrition (admissions, curriculum academic support, other) to further understand this trend and make appropriate adjustments.

Points of Pride: Our students are highly valued by employers. In the most recent survey of employers who hired graduates of the ISU CVM Class of 2021, 96% of respondents were either very satisfied (55%) or satisfied (41%) with the graduate they had hired and 100% said they would hire an ISU CVM graduate again.

Wellness

Goal: To provide resources that support wellness within our entire CVM community, making it a great place to work and learn.

Strengths: Over the past 5 years, the ISU CVM has supported several initiatives to foster wellness among our students, faculty and staff. Examples include creating an exercise facility and disc golf course located at the CVM campus, embedding a mental health counselor at CVM, having community safety ambassadors on the CVM campus during overnight and on weekends, initiating a student duty hours policy for students in their clinical training year, and supporting community events such as ice cream socials, international culture celebrations, and Donuts with the Dean to name a few.

Challenges: We continue to experience challenges in the LVMC with stressful working and learning conditions.

Future Plans: The LVMC and College will be partnering on embedding a social worker in the LVMC to help support wellness for both our community members and clients. Additionally, we will continue to prioritize programs and facility renovations that support wellness.

Points of Pride: The commitment of the student body in collaborating with the CVM in identifying and implementing strategies to create a well community.

Research Programs

Goal: To be a leader in One Health and Translational Medicine Research.

Figure 4: Word cloud generated from key words included in ISU CVM abstracts and manuscripts.
(Courtesy of Dr. Paul Plummer, Associate Dean for Research and Graduate Studies)

Strength: ISU CVM is recognized for its applied research in improving the health and well-being of livestock species especially as it relates to infectious diseases (Fig 4). We are recognized globally for our work in swine health, diagnostic medicine and antimicrobial resistance. The CVM consistently ranks #1 or #2 in research funding obtained from USDA among US CVM's. ISU CVM ranks #16 in NIH funding among all US CVM's. However, when you look at the 15 schools with more funding, all but three (NCST, UGA, CSU) have medical schools which is clearly advantageous.

Challenges: High quality research space is limited, which can be a barrier to recruiting the highest quality research-intensive faculty and supporting clinical faculty research.

Future Plans: The College is investing in newly renovated shared core laboratory space that will be completed in the summer of 2023 and will be developing plans to add newly renovated research spaces when space currently occupied by the Veterinary Diagnostic Laboratory is vacated.

Points of Pride: Over the last 10 years, ISU CVM consistently ranks #1 or #2 in total USDA funding among all colleges of veterinary medicine. In FY 2022, ISU CVM received $5,796,734 in USDA funding, the highest amount on record.

Service and Outreach

Goal: To provide innovative services and education to the people of Iowa, the US and the world.

Strength: The Veterinary Diagnostic Laboratory is recognized as the leading animal diagnostic lab in the US and the world. Their outstanding faculty and staff, innovative diagnostics, and state-of-the-art informatics systems have made them the go to laboratory for livestock diagnostics. Since 2018, caseload has increased by 31,000 cases (Fig 5). The VDL is also fully integrated into our other mission by providing a dynamic diagnostic medicine teaching laboratory and a rich source of material for scholarly activities.

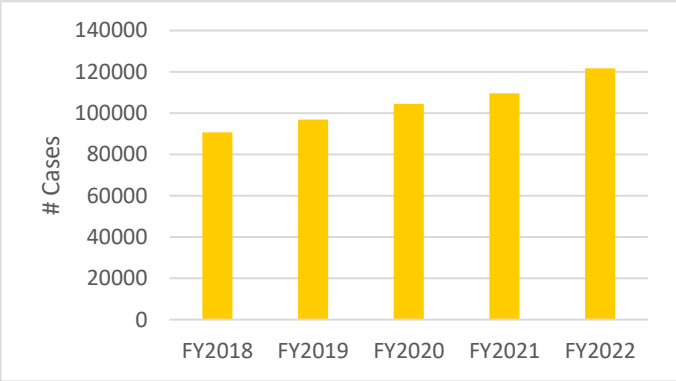

Figure 5: Veterinary Diagnostic Laboratory case numbers FY2018-FY2022.

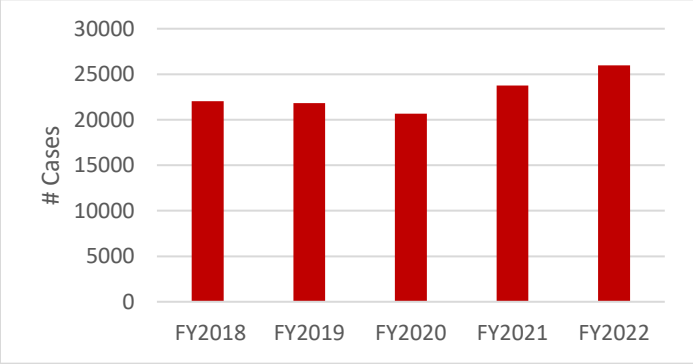

Figure 6: Lloyd Veterinary Medical Center case numbers FY2018-FY2022.

The Lloyd Veterinary Medical Center provides innovative medical services to all species of animals across Iowa and beyond. It serves as our primary clinical training laboratory for our DVM students and house officers. Cases have increased by ~4,000 cases since 2018 (Fig 6).

CVM faculty and staff are fully engaged in building a #STRONGIOWA. This is accomplished through formal ISU Extension programs, conducting and participating in continuing education programs and engaging with stakeholders across Iowa to help solve problems.

Challenges: Maintaining a workforce necessary to provide innovative services continues to be a major challenge. There is currently a shortage of veterinarians across all sectors of the veterinary profession. Competition for many specialty-trained veterinarians that are critical to our missions is intense. This requires creative solutions to recruit and retain high quality talent to deliver on our missions.

Future Plans: The CVM continues to evaluate what clinical and diagnostic services are critical to support the animal health care needs of the people of Iowa. Already recognized as a leader, innovations in diagnostic medicine will continue to be a focus of the VDL. The LVMC will look to build upon growing clinical services such as reproduction and oncology, while also exploring the needs for new services. A continued focus will be the integration of service into our teaching and research mission.

Points of Pride: During the pandemic, both the LVMC and VDL maintained services to our stakeholders. As has been well documented, the VDL was able to support SARS-CoV-2 diagnostic capacity within two months of the beginning of the pandemic and was a major factor in allowing Iowa State University to move forward with meeting its missions during the pandemic. Less well documented, the LVMC maintained critical animal health care services to clients and their animals during a time when animals became critical in helping the public deal with both the physical and mental health stresses of the pandemic. CVM extension faculty played a critical role in supporting the livestock industries as they faced unprecedented disruptions in the supply chain that significantly affected animal health.

Inclusive Community

Goal: To create a community that is welcoming to all.

Strength: During the past 5 years, the CVM has prioritized activities that support creating an inclusive and welcoming environment. The College DEI Committee, which is made up of representation from all sectors of our community, actively plans and executes activities throughout the year. Examples include first day of each semester lunch time seminars focused on DEI, Martin Luther King day of Service, Diverse Voices Book Club, and engagement in ISCOR/NCORE. The college has also invested in

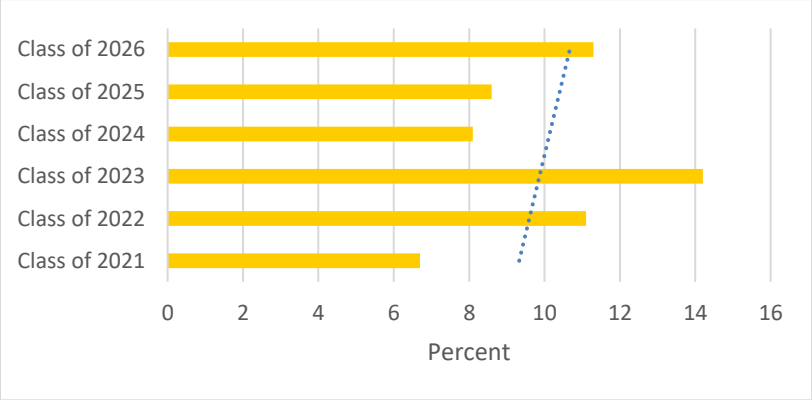

Figure 7: Under Represented Students, as defined by AAVMC, in ISU CVM. Dotted line is trend from the Class of 2021-2026.

faculty, staff and students taking the Purdue University on-line Certificate Program in DEI. ISU has had more participants in this program than any other CVM except Purdue.

Challenges: Although diversity among our student population, as defined by race and ethnicity, is increasing (Fig 7), it remains low when compared to other US CVM's (28.6% al US CVM's).

Future Plans: The CVM continues to invest in programs that create a welcoming and engaged community. We are currently limited by bandwidth and expertise of our DEI committee. We are moving towards a College leadership position that would increase our expertise and programming.

Points of Pride: During the 2022-23 academic year, the ISU CVM has celebrated the life and legacy of Dr. Frederick Douglass Patterson, our College's 4th black graduate (DVM 1923, MS 1925), who went on to have an incredible career that has profoundly impacted the veterinary profession, higher education and access to higher education for marginalized students. The broader college community has embraced this celebration and an enhanced level of pride that our faculty, staff, students and stakeholders have in the college has evolved. Additional outcomes from this celebration include the establishment of the Frederick Douglass Patterson Opportunity Fund endowment to support activities in the College focused on creating an inclusive community (currently ~$750k committed) and a proposal to name the core academic facility of the CVM complex *"Frederick Douglass Patterson Hall".*

International Programs

Goal: To provide our students opportunities to engage in clinical training opportunities internationally

Strengths: Our Office of Academic and Student Affairs (OASA) manages several international training opportunities stretching from Europe to Africa to South East Asia. Additionally, OASA provides logistical support to our students when they identify other international opportunities independently.

Challenges: Funding and resources for international programs linked to ISU CVM is limited.

Future Plans: The CVM is looking to leverage international opportunities in association with other ISU colleges, such as the CALS Uganda Program

Points of Pride: ISU CVM has a rich history of training students from around the world. As an example, ISU CVM is a partner with the U.S.-China Center for Animal Health at Kansas State University. Through this partnership, students from China matriculate to collaborate CVM's in the US to receive DVM training. Three Chinese students have completed their DVM training at ISU CVM and three more are currently enrolled in our DVM program. Recently, we initiated a similar partnership with National Chung-Hsing University in Taiwan and currently have two of these students in our program. These students add to the diversity of our community and provide a bridge between the US and Asia to further enhance on the delivery on our missions internationally.

Donor, alumni, and external relations

Goal: To have engaged external stakeholders that support our missions through advocacy and philanthropy.

Strength: Thanks to strong leadership from the ISU Foundation, support for philanthropy has been strong for the last 4 years. Our endowment has grown from $42 M to $95 M (Fig 8). A major priority when I arrived at ISU CVM was to grow scholarships for our students with a goal of investing $2 M in our students by the 2023/24 academic year. In 2022/2023, we hit $1.8 M and I am confident we will hit our goal in 2023/24 (Fig. 9).

In 2022, ISU CVM created an External Advisory Council that is diverse in multiple dimensions. They provide forward- focused perspectives and advice to help advance our College's mission and strategic objectives while providing members with rewarding opportunities to engage in and impact education, healthcare and the many communities CVM serves.

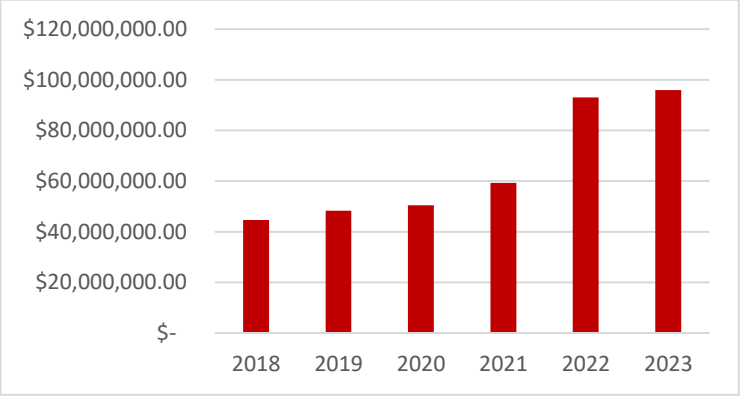

Figure 8: Value of the ISU CVM Endowment, FY2018-

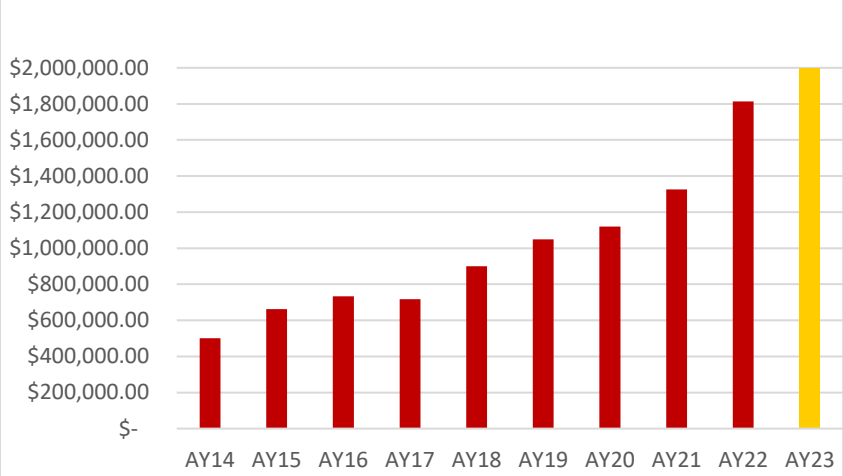

Figure 9: Scholarships for DVM Students AY2014-2022. AY2023 goal is $2,000,000.

Challenges: Because of a separate Veterinary Medicine Alumni Association not directly associated with ISU, engagement with alumni is somewhat fragmented and not always cohesive. We have worked hard to make sure that messages are consistent and priorities are in alignment

Future Plans: Priorities for future philanthropy will include scholarships, student success and facilities renovations.

Points of Pride: Engagement with our alumni and stakeholders by our entire community is incredible. It has been a priority to encourage and provide opportunities for everyone within the ISU CVM engage externally in a variety of ways. I believe this engagement is what has resulted in our increased philanthropy success over the past 5 years.

Goals and Vision for the Future of ISU CVM

Catalyzed by the Iowa State University's recently developed 10-year strategic plan, the ISU CVM launched a strategic planning process in the spring of 2023. The goal of this process is to identify strategies and associated actions to position the College for continued success in meeting our missions of training the next generation of veterinarians and scientists, answering questions important to animal and public health, and providing cutting edge animal health services to the people of Iowa and beyond.

Priorities that I personally have identified include the following:

- Complete the College strategic planning process
- Capital projects
    - Completion of the VDL phase I and II
    - Completion of LVMC oncology and theriogenology projects that facilitate service, teaching and research missions
    - Development and execution of the plan to renovate the old VDL space
    - Renovation of existing CVM academic spaces to increase functionality, improve aesthetics and incorporated elements of wellness.
- Successful completion of accreditation in 2024
- Driving stakeholder engagement and investment in the College, our programs, and our faculty, staff and students
- Development of programs that facilitate student success, wellness and inclusion
- Develop a College research identity that attracts scientists and global partnerships while addressing important questions for the citizens of Iowa and beyond

IOWA STATE UNIVERSITY
College of Veterinary Medicine