BOARD OF TRUSTEES

College Report on Operational Excellence | Fall 2020

Willie M. Reed, DVM, PhD, DACVP, DACPV

Dean, Purdue University College of Veterinary Medicine



New Purdue Veterinary Hospital: Update

All Facilities Fly-Around: Animation

New Drone Video





Organizational Structure

Purdue Provost

College of Veterinary Medicine Dean

IU School of Medicine Medical Education Program

Animal Disease Diagnostic Laboratory

Purdue University Veterinary Hospital

Caesars Entertainment Equine Specialty Hospital Engagement
Associate Dean

0.5 FTE

Academic Affairs
Associate Dean
0.75 FTE

Academic Departments:

Basic Medical Sciences

Comparative Pathobiology

Veterinary Clinical Sciences

Research & Graduate Studies

Associate Dean

0.5 FTE

Business Office
Advancement
Development
Diversity, Equity and
Inclusion
Information Technology

Purdue Veterinary Medicine:

Faculty: 124 Staff: 319

DVM Students: 334

Veterinary Nursing Students: 454 Graduate Students/Trainees: 101

IU School of Medicine:

Faculty: 27 Staff: 7

MD Students: 58

Alumni Relations & Special Events

Lifelong Learning

Distance Learning

Extension

P-12 Programs

International Programs

Public Affairs & Communications

Web Communications

Curriculum

Academic Standards

Veterinary Nursing

Student Services Center

Counseling & Wellness Services

Outcomes Assessment

Center for Animal Welfare Science
Purdue Comparative Oncology Program

Center for Comparative Translational Research

Veterinary Clinical Trials

Equine Sports Medicine Center

Center for the Human-Animal Bond

Center for Paralysis Research

Key Success Stories That Advance Strategy

New Strategic Plan 2020-2023

Veterinary Administration

2019 Construction of a new Veterinary Hospital – 3 buildings underway structurally; projected completion in 2021

National ranking: # 13 out of 30 U.S. Colleges of Veterinary Medicine # 1 among the Top 50 Veterinary Nursing Programs

Caesar's Entertainment Equine Specialty Hospital in Shelbyville, IN

Advancing sports medicine for Indiana's \$2 billion equine industry

Diversity programs' success (within the last 12 years)

Among DVM students

From 6.7% URM representation to 27.8% in 2020 29.3% URM and international students in 2020 35% URM entry in the Class of 2021

Among faculty
From 7% to 30% URM
From 30% to 54% women

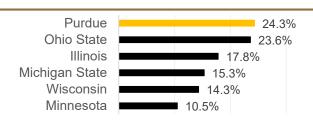
Recipient of the 2020 Health Professions Higher Education Excellence in Diversity (HEED) Award from INSIGHT into Diversity

Fundraising success

- Ever True goal of \$40M exceeded by 36% at \$54,388,447
- FY 2019-20 exceeded net goal of \$9M at \$9,146,475 despite pandemic
- New Veterinary Hospital: \$3,533,225 44% of goal
- 46 major gifts to new hospital 33 from first ever major donors to Purdue at large
- 2020 Purdue Day of Giving -- \$1,271,863

ADDL - COVID testing

Underrepresented Minority Students in DVM Programs Big Ten Universities, 2018 to 2020



Discovery

71 invention disclosures, 160 patent applications, 40 patent letters issued, 7 start-ups in the last 6 years

• Research awards in the amount of \$11.1M per year

Recruitment of critical mass of faculty in the area of musculoskeletal biology and orthopedics

• Three NIH R01 grants to support the research along with smaller foundation grants and industry contracts

Increased publicity and funding through the Center for the Human-Animal Bond

Research with children with autism and military veterans with PTSD

Specific COVID-19 research activities and funding to support the research

- NIH grant to develop adenovirus-vector vaccine in collaboration with the CDC and Penn State
- CTSI funding to develop targeted IL-27 therapeutics for protecting and treating COVID-19 lung disease
- Development of an intranasal and intradermal subunit COVID-19 vaccine in collaboration with PI4D, NIH grant pending

Engagement

The League of VetaHumanz

NIH-SEPA funded global live and remote role modeling program for K-12 youth

This Is How We "Role" Program

• National expansion of NIH Science Education Partnership Award (SEPA) role modeling program for K-4 children

Global Engagement:

59% of DVM Class of 2020 had an official study abroad experience

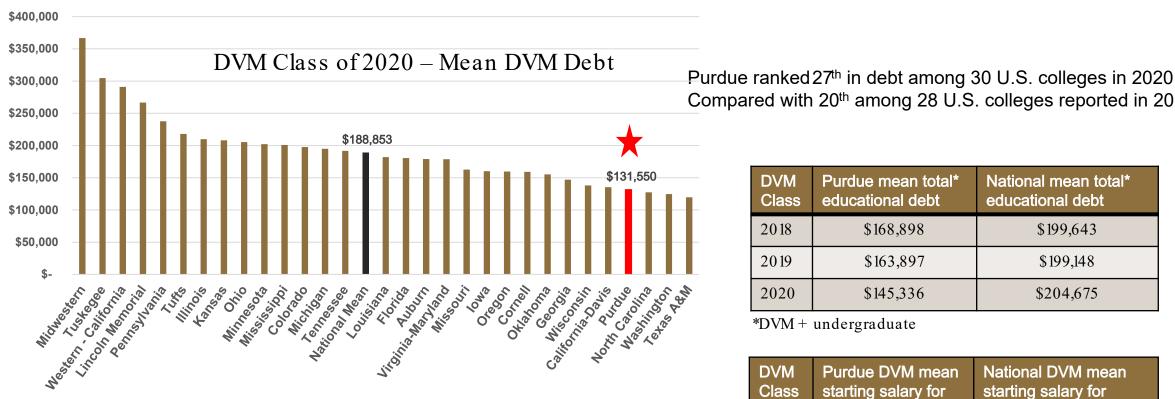
National Center for Diversity & Inclusion in Veterinary Medicine:

• Certificate program on diversity and inclusion (all 30 vet schools participate; international reach; financial support from outside entities)

The only nation-wide dog breeder certificate program/policy impact

Priority 4 Paws (service learning program featuring a mobile surgery)

Key Success Stories That Advance Strategy



Mean calculated after excluding DVM students with no debt Data Source: AVMA 2020, AVMA 2013



Compared with 20th among 28 U.S. colleges reported in 2013

DVM Class	Purdue mean total* educational debt	National mean total* educational debt
2018	\$168,898	\$199,643
2019	\$163,897	\$199,148
2020	\$145,336	\$204,675

^{*}DVM + undergraduate

DVM Class	Purdue DVM mean starting salary for private practice	National DVM mean starting salary for private practice
2018	\$82,273	\$77,546
2019	\$88,909	\$86,245
2020	\$94,053	\$92,796

Key Success Stories That Advance Strategy Delivering Discovery that Benefits Animal & Human

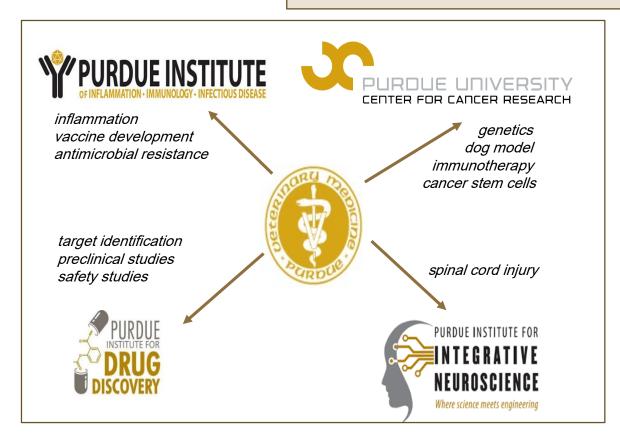
Growth of translational research

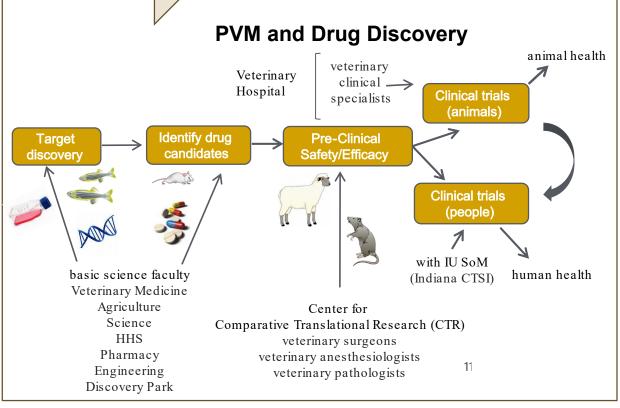
- · Collaboration with CTSI/Discovery Park
- Enhance signature research programs
- Summer Research Program Expansion for DVM & prevet students

Strategic faculty hires

- Laboratory renovations
- · Purchase of specialized equipment
- · New research services to support pre-clinical research

PVM will expand multidisciplinary and translational discovery of programs in our areas of strength that emphasize the development and use of animal models to benefit both animal and human health.





Key Efforts to Enhance Operational Excellence

Veterinary Administration

Informational Technology (IT)

- IT reorganization in partnership with College of Agriculture for effective IT leadership
- Consolidation of IT units within the college

Animal Disease Diagnostic Laboratory (ADDL)

- Strategic fee adjustments based on cost and market analyses
- Merging 2 sections (serology, avian) to enhance operational efficiency, client service
- Expansion of molecular diagnostics
 - Key role in Purdue's COVID-19 testing strategy 66,036 tests run
 - Plans to continue expanding animal testing options (on hold currently due to COVID-19)

Purdue University Veterinary Hospital

- Client Liaison model: Improved customer service, streamlined operations (payment within exam rooms, one source of contact for clients)
- **Client communication tool** for direct texting between clients and staff re: appointment reminders, case updates, questions to clinicians, etc.
- Remodeled Small Animal Reception to improve customer service, satisfaction, loyalty
 - Dedicated cat waiting area; separate phone center for a more comfortable, peaceful client experience
- New services To include alternative medicine services such as physical rehabilitation, recovery care
- **Increased caseload** leading to 15% revenue growth compared to 2017-18 supporting critical investment in staffing and equipment.



College of Veterinary Medicine

Research and Graduate Studies

Continued investment in shared equipment rooms and maintenance contracts

Investment in monitoring, maintenance systems for -80C freezers across the college

• For early warnings of failing freezers to avoid loss of valuable biological samples and reagents

Combined graduate research seminars

- Increased awareness, collaborations across college
- Created a forum to bring in high profile speakers

Learning

New DVM curriculum implemented in fall 2018 (Final year being implemented in 2020-21)

Emphasis on clinical-, communication-, business-skills' training and professionalism in pre-clinical curriculum

- Clinical Skills Laboratory is an important teaching resource (Reduces the use of animals in teaching)
- Maintaining hands-on training in spite of COVID-19
- Objective Structured Clinical Examinations (OSCEs) ensure students master skills prior to entry into hospital

Shelter Medicine Program

- Delivers a service to shelters in Indiana
- Provides surgical experience to DVM students and anesthesia experience to VN students
- During COVID-19, social distancing cannot be achieved on the mobile unit; so performing surgeries on shelter animals on campus.





Key Strategic Issues, Plan's tear Next 3

Strategic Plan Focus Areas: Programmatic Excellence, Collaboration, Food Animal Focus, and Investing in People

Learning

Explore DVM enrollment growth

Integrate DVM curriculum content

Incorporate clinical education within each year

Strengthen Veterinary Nursing Program's linkages with DVM program

Better prepare graduates for careers in the food animal sector

Invest in infrastructure

- High priority: Renovate old small animal hospital
- Equipment for new hospital
- Expand (clinical-skills) learning spaces

Discovery

Achieve excellence in six primary areas of research focus:

- Infectious diseases and immunology
- Cancer
- Neuroscience
- Musculoskeletal, orthopedics, and tissue engineering
- Animal welfare science
- Antimicrobial resistance

Facilitate clinical trials in the VTH/ADDL

Improve research infrastructure

Engagement

Promote PVM clinical and diagnostic services to the veterinary community

Further develop shelter medicine program

Expand international partnerships in educational and discovery opportunities

Promote veterinary/biomedical careers and animal health through P-12 and undergraduate engagement activities

Challenges to Overcome

Highest unfunded strategic priority

Renovation of small animal hospital

Funding for new master plan

Rapidly increasing educational debt for DVM graduates

Continued AVMA Council on Education (COE) accreditation will require:

- New veterinary hospital
- Renovation, expansion of laboratories, and classrooms

Need for more research and diagnostic space

Increased competition from private referral practices for hospital caseload and specialists

ADDL-Southern Indiana Purdue Agricultural Center (SIPAC) lab replacement