

PATHWAY DEVELOPMENT IN VETERINARY MEDICINE

TOPIC OVERVIEW

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AWARENESS

What is pathway development?

Pathway development is the intentionality of identifying, exposing, and supporting underrepresented students (especially pursuant to race, ethnicity, and socioeconomic status) to consider a profession in veterinary medicine. These programs target age ranges from kindergarten through fifth grade, middle school (12-15 years of age), high school, and undergraduate students and can range from an individual event to a continuous program.

UNDERSTANDING

Key take-home messages.

- 1** Pathway programs are an important way to inspire students from Black, Indigenous, and People of Color (BIPOC) populations to pursue a career in veterinary medicine.
- 2** Proactively contacting schools and youth organizations in areas with BIPOC populations to volunteer your time for career days and mentoring is a great way to get started.
- 3** Don't underestimate the positive impact you can have on a student AND their parents while caring for their pet. Take that moment to encourage, educate, and hopefully inspire them about veterinary career opportunities.

TRANSFORMATION

Specific actions you can take to generate positive DEI change with your team, workplace, clients, and community.

- 1** Consider providing paid student internship programs for high school and college students to help eliminate socioeconomic barriers to gaining valuable experience.
- 2** Partner with youth organizations (Boys & Girls Clubs, local YMCA) and schools to participate in career days and open houses at your workplace to introduce students to the field of veterinary medicine.
- 3** Add books to your waiting room that show diversity in the veterinary field and download coloring sheets from vetsofallcolors.org to give out to children when they visit your practice.
- 4** Join an organization in veterinary medicine dedicated to supporting and mentoring students in pathway programs, such as Purdue University's This is How We Role, Pawsibilities, BLENDvet, and Diversify Veterinary Medicine Coalition (DVMC).

TOPIC ESSAY

Pathway development in veterinary medicine

Pathway development initiatives intentionally target students who are Black, Indigenous, and People of Color (BIPOC) by providing educational programming, mentorship, and support in professions where BIPOC students are underrepresented.

In 2021, the U.S. Bureau of Labor and Statistics reported that 93.3% of U.S. veterinarians were white, 1.2% Black, 4.7% Latino, and 5.6% Asian; in 2013, the percentage of white veterinarians was 96.5%, indicating minimal change over the past 10 years.

These numbers certainly do not align with the racial diversity among today's pet owners. The results of the 2020 U.S. Census revealed a much more racially diverse country, with Millennials and Generation Z listed as the most racially diverse generations. Millennials now have the highest rate of pet ownership at 75% according to the 2022 AVMA pet ownership and demographics sourcebook (n.d.). The 2017 data from the AVMA pet ownership and demographics sourcebook (n.d.) showed that there were pets in 64.7% of white households, 61.4% of Hispanic/Latinx households, and 36.9% of Black/African American households.

As pet ownership demographics evolve, the veterinary field should also evolve. We can “expect increased client visits if/when the demographic and cultural makeup of the veterinarians and staff reflect those of the animal-owning public they seek to serve” (Wolf et al., 2008). In fact, pet owners who were Black, Indigenous, and People of Color were 8% to 12% less likely to seek the services of a veterinarian after correcting for income, education, rural vs. urban residence, rent vs. own, age, family size, marital status, region of the country, season, and year (Wolf et al., 2008).

It is crucial for veterinarians to recognize and understand the diversity in cultural norms and differences of the communities they serve. However, it is equally important for them to take proactive steps to actively recruit and foster a more diverse workforce. Mere efforts to find newly graduated BIPOC veterinarians may not be sufficient due to the various barriers these communities face to becoming a veterinarian.

We need to go back further. Research shows that 41% of career aspirations that kids had before age 12 matched their current occupations as adults (Greenhill et al., 2020). This means the veterinary profession must be intentional in identifying opportunities to recruit and retain young students of color into the pathway as early as possible.

Understand the Barriers

Despite growing up in the cultural diversity of NYC, I saw very little of myself in veterinary medicine. From the age of 12, I relied on my mother to find opportunities to be exposed to the veterinary field, to

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show me BIPOC representation among veterinarians, and to find resources to maintain my passion for the profession.

Barriers to Becoming a Candidate

Veterinary professionals must gain an understanding of these types of barriers that limit BIPOC students from becoming viable candidates within the pathway. These factors can include the following:

- Lack of representation of veterinary professionals.
- Inequities within the U.S. educational system, where exposure opportunities such as Future Farmers of America and 4-H clubs are not universal programming.
- Lack of knowledge and awareness of the educational requirements for veterinary schools from parents, guidance counselors, and educators.
- Lack of parental support for a variety of reasons.

The Homogenous Culture Barrier

It is also important to note that for BIPOC students that do have exposure to the profession, the homogenous culture of veterinary medicine can still be a significant barrier. Underrepresented students prefer a veterinarian of a similar background as it strengthens the veterinarian-client-patient relationship and improves compliance, loyalty, and service (Greenhill, 2019).

Episodes of racism, sexism, homophobia, or other kinds of intolerance and discrimination, whether in school or small practice, can leave an impression that the veterinary profession is inhospitable. This can cause the profession to lose more diverse candidates.

Veterinary professionals must work to understand how these barriers appear in workplaces through the form of microaggressions, bias, and stereotype threats that erode confidence and encourage disengagement from the profession altogether. Pathway development initiatives must then take into account these barriers that arise from a homogenous culture that does not embrace inclusion and belonging.

Designing Pathway Programs

Career development intervention can give adolescents the confidence to pursue career goals that can be perceived as unattainable to them, their peers, and their parents (Greenhill et al., 2020). Veterinary professionals must embed themselves within schools, offer guidance, and develop connections for students to have favorable experiences in veterinary medicine.

Pathway initiatives can vary in location, duration, and overall goal. They are designed for targeted age groups so the activities, resources, and support can be customized to the needs of the group. Stages of pathway development include preschool, kindergarten through fifth grade, middle school, high school, and college.

So where do you start? Some programs are designed for initial exposure, such as a career day, whereas other programs are designed to provide continued exposure, opportunity, mentorship, and resources. Here are examples and ideas for developing pathway programs.

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Initial Exposure: Career Days / Open House

Veterinary hospitals have an opportunity to become the frontline for exposure to students interested in pursuing veterinary medicine.

Reach out to local schools to participate in career days, especially if you live in a rural area. Bring informational resources appropriate to the student's age that show diverse representations of veterinarians. This can include coloring books, pamphlets, picture books, and educational books. It is even more important in rural areas to see this representation. In a survey done with 8- and 11-year-olds, when asked what they wanted to be when they grew up, children from rural areas were more likely to respond with a parent's occupation than children from urban areas, due to lack of exposure (Trice, 2010).

Organizing an open house at your veterinary hospital is a terrific way to provide initial exposure and cultivate a diverse and welcoming environment. Students from underrepresented communities would be invited to meet the team, take a tour of the hospital, and get hands-on training. Create a library in your waiting room with age-appropriate books on veterinary medicine to spark curiosity and interest.

From the moment a student enters your hospital's doors, you can provide them with an opportunity to engage with veterinary professionals and teams that can have a profound impact on their career choice.

Providing an inclusive and welcoming experience for students can mean leveraging your recruitment practices. Becoming intentional about diversity recruitment within veterinary teams matters. Seeing diversity within a veterinary team offers a sense of comfort for underrepresented students to express interest, engage, and seek opportunities for more exposure to the veterinary field.

Engage Students During Examinations

Providing coloring books during appointments (such as those available at vetsofallcolors.org) and being intentional about including them in appointments allow students to see the diversity of veterinarians in career paths within the profession.

During appointments, ask students directly if they have any questions about their pets. Include them when appropriate in the examination to engage their interest. As children often return with their parents, this builds a rapport with the family, which helps the veterinarian-client-patient relationship.

Ongoing Partnerships and Mentorships

Through ongoing partnerships, students gain an opportunity to develop a mentoring relationship that can lead to a job opportunity.

Veterinary hospitals can collaborate with local schools and community organizations such as the YMCA, Boys & Girls Clubs, and Scouts BSA. As students mature, shadowing experiences allow for a unique opportunity where students can observe a veterinarian and/or team up with them through their daily activities.

Other initiatives include partnerships with your alma mater or veterinary schools that sponsor summer residential programs/camps. There are opportunities to participate as a lecturer, offer continued mentorship for students' post-program, and/or offer financial assistance for students to attend these programs.

Successful programs provide the following opportunities for students: a series of successful experiences; observations of scientists, faculty, and staff who reflect the ethnic background of the adolescents who are participating; receipt of positive feedback from scientists, faculty, or staff; constructive expression of anxiety and concerns; and positive emotional experiences to build on. These efforts have been shown to increase confidence and career aspirations for adolescents with ethnic, socioeconomic status, and gender identity variables (O'Brien et al., 1999).

Why It Matters

A lack of diversity in veterinary hospitals and in the field not only cultivates and exacerbates barriers in our examination rooms as we serve a diverse clientele, but also fosters a homogenous culture. Studies have shown that businesses that

embrace diverse perspectives and promote inclusion experienced higher innovation, enhanced team engagement with problem-solving, and retention, all of which increase profit margins (McKinsey, 2020).

As our profession grapples with the recruitment and retention challenges of veterinarians, we must make a commitment to identify and collectively build a pathway of new talent with diverse backgrounds, experiences, and perspectives to help address cultural and socioeconomic barriers that affect our daily practice. We must also look to create a profession that fosters and celebrates an environment of inclusion and belongingness. This is vital to encourage and support BIPOC students and change the narrative of the veterinary profession. ■

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Appendix:

Historically Black Colleges and Universities that Offer Pre-veterinary and Related Programs (Mattson, 2019):

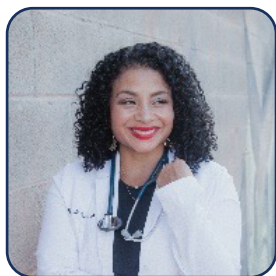
- Alabama A&M University (Alabama)
- Alabama State University (Alabama)
- Alcorn State University (Mississippi)
- Delaware State University (Delaware)
- Florida A&M University (Florida)
- Fort Valley State University (Georgia)
- Lincoln University (Missouri)
- North Carolina A&T State University (North Carolina)
- Prairie View A&M University (Texas)
- South Carolina State University (South Carolina)
- Southern University and A&M College (Louisiana)
- Tennessee State University (Tennessee)
- Tuskegee University (Alabama)
- University of Arkansas Pine Bluff (Arkansas)
- University of Maryland Eastern Shore (Maryland)
- Virginia State University (Virginia)
- West Virginia University (West Virginia)

Representative Summary of P-12 Programs at Schools and Colleges of Veterinary Medicine (Greenhill et al., 2020):

- College of Veterinary & Biomedical Sciences at Colorado State University
- College of Veterinary & Biomedical Sciences at Texas A&M University
- College of Veterinary Medicine at Michigan State University
- Cornell University College of Veterinary Medicine
- Kansas State University College of Veterinary Medicine
- Louisiana State University School of Veterinary Medicine
- North Carolina State University College of Veterinary Medicine
- Purdue University College of Veterinary Medicine
- University of Georgia College of Veterinary Medicine
- University of Illinois College of Veterinary Medicine
- University of Minnesota College of Veterinary Medicine
- University of Tennessee College of Veterinary Medicine

Representative Summary of Undergraduate Programs at Schools and Colleges of Veterinary Medicine (Greenhill et al., 2020):

- College of Veterinary Medicine at Michigan State University
- Colorado State University College of Veterinary Medicine and Biomedical Sciences
- Purdue University College of Veterinary Medicine
- Tuskegee University College of Veterinary Medicine, Nursing and Allied Health
- University of California-Davis School of Veterinary Medicine
- University of Minnesota College of Veterinary Medicine
- Virginia-Maryland Regional College of Veterinary Medicine



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Dr. Niccole Bruno is the CEO and Founder of Blendvet™, a veterinary hospital certification program in diversity, equity, inclusion, and belonging (DEIB). Despite growing up in the cultural diversity of NYC, Dr. Bruno saw little of herself in veterinary medicine. From the age of twelve, Dr. Bruno relied on her mother to find exposure opportunities, representation, and resources to maintain her passion for the profession. She graduated from Cornell University School of Veterinary Medicine in 2006. Once a veterinarian, Dr. Bruno knew that she had an opportunity to pay it forward and create opportunities for other underrepresented students to see themselves in veterinary medicine. She participated in career days, provided shadowing opportunities for students, and worked with the Cornell Cooperative Extension Program in Suffolk County to introduce veterinary medicine to students in NYC and Long Island. Her nine years in leadership have fueled her efforts to help veterinary hospitals understand their role in pathway development to create more diverse representation in the veterinary field. Her company, Blendvet, now creates pathway programming at veterinary conferences and academic institutions to bring awareness of veterinary medicine to students and parents.

RESOURCES

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