BodyViz is an anatomy software offering 3D visualizations directly from MRI and CT data on a laptop, PC and iPads. This proposed educational tool will support the College of Medicine's anatomy & physiology (A&P) courses. The technology utilized by BodyViz will allow future medical doctors, as well as FAU students who take A&P courses as part of their health science, College of Science, or College of Engineering program, to gain an enhanced understanding of A&P using repeated, non-destructive exploration, examination, and dissection: thus giving them an educational edge in an increasingly tech-savvy academic world, and beyond into their professional careers.

Students utilizing BodyViz approach learning A&P differently than their peers who rely on 2D visualizations and cadaver dissections. Learners have the ability to peel away tissue types and explore the complex 3D spatial relationships of interconnected systems, can repeatedly dissect the same anatomy until confident in their mastery, can easily change their viewpoints and explore anatomy from the inside out, save their progress and return to the learning objectives at any time, and more. Moreover, Students can access BodyViz from anywhere at any time via BodyViz Sync software and tablets.

A&P is "the cornerstone of medical education," and has been traditionally taught through gross dissection and group lectures in conjunction with 2D atlas images, anatomical manikins, and clinical cases (1, 2). Learning anatomy requires "identification and comprehension of numerous structures within a three-dimensional (3D) space" (2). Cadaver dissection, the traditional method to learn 3D A&P, has been challenged by lack of time and resources in the classroom, as well as pressure for students to be able to study and learn at home (1, 3). 3D visualization software augments traditional methods of teaching A&P, not only enhancing course material but engaging a different learning method to appeal to a student population of diverse learners.

3D software also prepares students for real-world applications of their A&P skills. Using digital software tools provide a connection with what is viewed on the screen with a real-world scenario, prompting thought-provoking, hands-on experiences in a virtual setting (4). Furthermore, both students and surgeons can use 3D computer models for operation planning so as to take into account potential complications and consider possible solutions without pressure (1, 4). As technology continues to expand, patient education is another possible area in which to utilize 3D software, aiding surgeons in explaining procedures and gaining patient consent (1).

Incorporating BodyViz into the medical curriculum directly aligns with Goal 3 of the 2018-2022 COM Strategic Goals and Signature Initiatives: **Harness innovation to drive educational excellence**.

- *Build on the strength of our undergraduate medical program: keep our humanistic and individualized approach while innovating with new high-touch, high-tech initiatives.*

- *Leverage opportunities with FAU Colleges, Pillars and Community Partners to maximize potential collaborations.*

BodyViz would also enable the College of Medicine to align with the Florida Atlantic University platform **Undergraduate Research and Inquiry** and the University goals of **Boldness.**

- Distinction through discovery and research experiences that promote scholarship and graduation.
- Develop an academic support structure for timely student graduation
    - Elevate the use of eLearning to supplement classroom education
    - Evaluate and update curricula to be aligned with evidence-based practices, as established by learning sciences
    - Assist faculty to develop innovative instructional methodologies and designs across the curriculum
- Elevate the levels of student success beyond graduation.
    - Achieve high numbers of students employed in well-paying jobs after graduation
    - Achieve high placement levels in graduate, post-graduate, and post-professional
      educational, training, and research programs, particularly with prestigious institutions

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