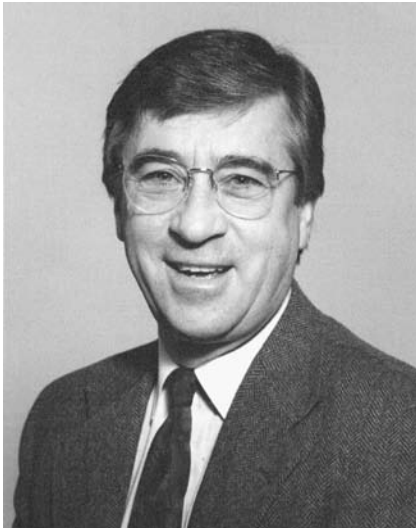


# 37

## Dean Anthony J. Adams

Anthony Adams is an Australian optometrist who became one of the most influential and respected leaders of academic optometry in the United States.... The profession of optometry has changed a lot since this boy from Box Hill High School began his optometry course in Melbourne, Australia. The development of the modern optometric profession and its new directions owe much to the contributions of Tony Adams.

—Ian Bailey, 2002



Anthony Adams, c. 1980s, photograph, Archives.

Anthony Adams, OD, PhD (born October 12, 1940), spent his childhood in Kew, a suburb of Melbourne, Australia. He graduated from the University of Melbourne in December 1962, where he received a bachelor of applied science (BAppSc) degree with honors, along with his Licentiate in Optometry from the affiliated Victorian College of Optometry. For five months, he worked part time in a corporate private practice (Coles and Garrard) staffed by nearly twenty optometrists, while also performing fill-in work in several other optometric practices and occasionally traveling throughout Victoria as an itinerant optometrist.<sup>1049</sup>

Adams remembers with particular fondness some philanthropic screenings in suburban locations in which he examined thirty to forty patients daily. He also worked in more outlying regions. During one of those expeditions, he received a life-changing telegram:

I also was sent into the countryside with essentially an optometrist's office in the car. So ... I could arrive in a rather large country town and set up a practice in a room that might have been a civic hall or an odd-fellow's whatever meeting place. The pharmacist in the town usually had made the appointments ... and I would arrive ... one or two days a week for a period of five or six weeks, and it was a great experience. I would set up in the office.... I even had a regular refractor head with lenses mounted that was made especially for this with lighted eye charts ... self-illuminating ... there was no projection in those days....

They were relatively big towns that had not attracted optometrists to them.... So it was in one of those [towns]—I vividly remember it—that I got a telegram ... an invitation to go to Indiana University to do graduate work.... There was a fellow ... [who] really put Indiana University on the map ... Henry Hofstetter [1914–2002; dean of optometry at Indiana 1952–70], and he was interested in those days, almost the only one ... in what I would call nowadays “international aspects of optometry.” So he made a point of keeping in touch with people in lots of different countries. And he actually grew his first PhD program through those sorts of contacts. I went there [Indiana] as a graduate student to do what I thought was a master's degree, but it turned out to be a PhD.... The main mentor was Gordon Heath [PhD Berkeley Optometry '60], who turned out to be my

PhD advisor. But I remember getting this telegram, and I was upstairs [in] ... a community hall ... where one night they could be doing square dancing and another night having a town meeting and another night having an art festival ... or even a farmer's market. It was really a rough old place.... As I recall, they offered me a \$1,600-a-year student assistantship, which seemed like an enormous amount of money at the time.<sup>1050</sup>

When Adams arrived in Indiana in 1963, a new era was emerging in the neurophysiology of vision. Recent research on the mammalian visual system by David Hübner and Torsten Wiesel had excited the world of vision science (they received the Nobel Prize in 1981 for their work during the 1960s–70s on ocular dominance columns in cat striate cortex). In the psychology department, Russell De Valois (a future faculty member at Berkeley Optometry; see Chapter 28) was making groundbreaking electrophysiological recordings from the lateral geniculate nucleus of macaque monkeys and unraveling the neural coding of color vision. At Indiana, Adams learned neurophysiological techniques in research with Donald G. Pitts (OD Southern College of Optometry, PhD Indiana University 1964), who was studying accommodation in cats, and for a few weeks with Richard Hill (Berkeley Optometry '58, PhD '61), who had recently moved from Berkeley Optometry to Ohio State University and was studying motion detection in rabbits. After some experimentation with retinal recordings in frog retina, Adams switched his focus and began neurophysiological studies of color vision using open-eye preparations in goldfish.<sup>1051</sup>

In 1967, at an international vision science symposium hosted by Indiana University, Dean Meredith Morgan and Professor Merton Flom recruited Adams (to the dismay of Indiana faculty) to join Berkeley Optometry as an acting assistant professor while he was completing his PhD. Morgan offered an “over range salary” starting at \$9,720, below Indiana's offer but still an attractive leap well beyond his student stipend, and the pot was sweetened with the promise of an immediate raise and reappointment to assistant professor II upon completion of his PhD.<sup>1052</sup> There was also the prestige associated with a world-class university. These lures were enough to seal the deal, and Adams began his career at Berkeley in 1968. For years afterward, he debated, tongue-in-cheek, with faculty colleague Lawrence Stark over which recently departed faculty member—Horace Barlow or Gerald Westheimer—each of them had replaced. (Officially, Stark replaced Barlow and Adams took over Westheimer's position.<sup>1053</sup>)

During the courting stage, no mention was made of the severe lack of space that had been a significant reason for Barlow's and Westheimer's departures; see Chapter 28. Adams was not especially concerned, because his need for space was modest. He did, however, have an amusing encounter with Meredith Morgan on the issue of accommodating a research experiment:

I finished up getting the room ... that used to be [one of] Barlow's rooms, so that became my office and lab. And then later ... it became a lab and I had an office in a trailer ... where ... [Minor Addition] is right now.... I was not that conscious of a space crunch....

I was studying at the time, almost on my own, an interesting phenomenon on a traffic light illusion that required my subjects to view ... little lights mounted on trolleys at a distance, one above the other, to judge whether one was closer than the other.... So I had this long, long, long box with ... strings and pulleys.... I had this belief ... that you only had to have an optometric problem to cause the illusion ... that if you had any cyclo-rotation of the globe ... when there is no fusion lock ... no targets ... that make the images in each eye want to register exactly ... they can actually have a minor rotation, cyclophoria.... then the images would fall on the two eyes in the same way as they would if one light was in front and one behind. In other words, the disparity between where the images were on your retina from one light being in front of the other was replicated by two lights that were actually in the same plane, but [with] an eye rotated.... I was trying to force the eye to rotate by rotating a pair of slides in a haploscope ... looking at half-silvered mirrors at the lights. So I was generating this rotation myself. And sure enough, ... [the images] misaligned, they [subjects] said the things were in the same plane when they weren't, and vice versa.

So the funny part of the story—and I'm sorry it's around the barn here—Meredith said, “Oh, you can do that. If you need a seventy-foot throw, you know, we've got it.” And that turned out to be the attic [in Minor Hall]. It had a lot of storage stuff up there.... So I went up and sure enough ... it was the full length of the building.... But to get there you had to go through the men's rest room, so therefore if you had any subjects, they'd have to be male, and

you went up a ladder that was a bit dicey, and as you're going up, there's a great big sign that says, “Keep Out by Order of the Fire Department” or something like that.... [There] was not supposed to be any storage or any anything in that huge space. I chuckled many times over the years about Meredith having the gall to tell me that that would be a good research space. He used to chuckle with me as the years went by.<sup>1054</sup>



Anthony Adams, c. 1970s, when his office was in a temporary trailer adjacent to Minor Hall. Photograph, Archives.

While at Berkeley, Adams completed most of the research for his dissertation on

There are 6 more pages in this chapter.