

Avian Diseases: The Creation and Evolution of P. Philip Levine's Enduring Gift

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This account has two aims. The first is to provide a tribute to Dr. Pincus Philip Levine, the founder of *Avian Diseases*. It will address several facets of the life and times of this remarkable and interesting personality giving some insight into the why and how he came to establish the journal. It will touch on his background, his character, his astute and searching mind, his ability to interact with others, his influence on veterinary, and especially avian, medicine, his teaching genius, and the positive force he was in his interactions with others.

Then, it will turn to a celebration of the first half century of the journal which he created, essentially single-handedly, and review some of the history regarding the stimulus, birthing pains, and gradual evolution of the journal through a succession of editors, business managers and supporting casts to the publication which we see today, nearly 50 years later.

Part I: P. P. Levine – his career

Dr. Levine was born in 1907 in New York City. After receiving the BS degree from City College of New York in 1927, he entered the Veterinary College at Cornell. He finished with both MS and DVM degrees in 1932 (Figure 1), having had an interruption for a year to teach school in New York City (probably for financial reasons). As a school teacher, he may have taught English, which if true, maybe foretold his future career as an editor. After a couple of years working for the New York State Conservation Department he returned to Cornell and earned his PhD in 1937.

His entire career after 1937 was in the field of avian diseases and was spent entirely at Cornell, aside from numerous consultancies, teaching assignments, and sabbatic leaves abroad. First of all he was a parasitologist, but he was a bacteriologist and a virologist as well. There were a number of firsts recorded in his over 70 scientific papers. Just a few are noted here:



Figure 1 – Dr. P. Philip Levine's Cornell Veterinary College graduation photo (1932)



Figure 2 - Coccidiosis research spanned Dr. Levine's career

Coccidiosis research: He initiated the use of sulfonamides for the control of the disease. How much did this save the poultry industry? Most certainly, this single discovery was hugely important in establishing the feasibility of large-scale poultry production as we see it today, largely because coccidiosis was a limiting factor. He also discovered and described two new coccidial species: *E. hagani*, and *E. brunetti*, both named after Cornell colleagues. (Figure 2)

Mycoplasma research: Egg dipping to prevent vertical transmission of "PPLO" was his idea., a novel approach to eradication efforts which helped lead to control of CRD. This idea was generated after he read a Vineland Laboratories patent which sought to use an egg-dipping technique to introduce hormones into the developing embryo. The aim was to provide all-female progeny (it didn't work!).

Virus research: With Julius Fabricant, he described duck virus hepatitis when it first appeared in the mid-1940s. And, they developed control methods that literally saved the duck industry and led to the establishment of the Duck Research Laboratory on Long Island.

His personal direct contributions are but part of the story. He steered many of his colleagues, particularly those working under his direction at Cornell, into projects that were relevant, challenging, and rewarding. Often this was through such gentle suggestions that the person doing the work frequently came away thinking he or she had come up with the ideas.

He was exceptionally selfless and purposely would try to fade into the background so that credit would go to others. Few of us could be so described. In truth, he was the scientist with the brainchild that was behind many studies done by others.

Dr. Levine, the teacher, had few peers. Third-year students who took his required course in poultry diseases lamented the fact that he did not teach something they were *really* interested in, like parasitology – he was that good a teacher. He was a stimulating and provocative speaker, and had superb skills in his delivery and ability to capture his audience. His skills in organizing a talk were obvious. Often, on short notice, he wrote out a few notes only minutes before getting up to give a beautifully organized and superbly delivered talk. That could be his only

preparation.

His graduate students found him to be a demanding advisor. If they did not understand the meaning of the word “controls” when they started, they most certainly did when they finished. Everything had to be done in a searching fashion and with creativity. Simply repeating the work of others was not enough. And reporting the results of one’s research fully and accurately was just as important. Second-rate was not tolerated.

He had a superb ability to analyze and draw logical conclusions, displaying a cool head and an extraordinary talent for sifting the wheat from the chaff. Many speakers at meetings benefitted from his searching questions and sometimes embarrassing conclusions (Figure 3). But he always conducted these exchanges in a gentlemanly manner.

His personal traits, aside from his high standards, included a large measure of decorum and respect for others. He mixed easily with high-level administrators and yet was very comfortable rubbing elbows with members of the poultry industry. In addition to being respectful of others, he commanded *and demanded* respect. Few people called him by his first name unless they were truly his peers. And yet, on the other side of the coin, he was far from aloof. He had one policy which was especially admirable. No matter how busy he was, he always maintained an “open door” policy which effectively invited people to enter his office – and he never said “come back later when I am finished with what I am doing.” He made time for you then and there. In spite of his seemingly serious nature, he had a marvelous sense of humor and loved telling stories of past events, often repeating them over the years with each recounting getting bigger and better in the details. One of his two sons once took an “out of character” picture of him sitting atop a motorcycle and wearing a leather jacket. The inscription under the photo was “Evel Levinl.”



Figure 3 - Dr. Levine providing “pointers”

The inscription under the photo was “Evel Levinl.”

Dr. Levine was a member of the Department of Pathology and Bacteriology in the Veterinary College. Because he showed interest in poultry diseases, a characteristic lacking in most of the faculty, he was assigned responsibility for anything “avian.” In this role, he oversaw the research and teaching programs, diagnostic services, and extension activities dealing with poultry diseases. He had many of the responsibilities of a Department Chair but without the attending authority. In this role, he still was able to accomplish a great deal. He established several branch laboratories throughout New York State and was chiefly responsible for the unique Duck Research Laboratory on Long Island, a world resource. When he was offered a significant and attractive position at another veterinary college, Dean George Poppensiek asked him what it would take to keep him at Cornell. His response: Make me the Chairman of a Department of Avian Diseases. This was quickly done in 1961. It was the second department of its type in the US, the other being in California. He held that position until 1966 when he stepped aside and Dr. Stephen Hitchner took the reins. For the next several years, until his retirement in 1973, he continued with research on coccidiosis in the facility which had been named in his honor: the “P. Philip Levine Research Laboratories for Avian Diseases” at the Veterinary College’s research complex on Snyder Hill.

It bears noting that for many years he indulged one of his true extracurricular loves, the game of handball. Music was another diversion and he played the violin regularly with a small group of musicians in the area.

Part II: The creation and evolution of *Avian Diseases*

The major aim for this presentation is a description of Dr. Levine’s role in establishing the journal *Avian Diseases*. Clearly, he had a deep and respectful appreciation of good science and the reporting of such. Editorial work came as a natural to him. He wrote exceptionally clear and concise reports and his command of the English language was superb. And, he was organized and cognizant of deadlines. This led him to involvement with a journal published by the New York State Veterinary College entitled *The Cornell Veterinarian*. He became Editor of the journal for a period of five years and subsequently was on the editorial board. He, along with many of the others engaged in poultry disease research at Cornell, published frequently in the journal.

The idea of a journal that would be devoted exclusively to the subject of poultry diseases was not new. According to some historical notes from the archives established by the AAAP, “....it is well known that P. P. Levine was dreaming, discussing, and planning such a publication during the late thirties and the early forties.” Also, in the first issue of *Avian Diseases*, Dr. Levine noted that Drs. William Hinshaw and Frederick Beaudette had considered starting a journal of avian pathology, but plans were dropped coincident with the start of World War II. He further related that Dr. Beaudette was enthusiastic about his (Dr. Levine’s) plans to start *Avian Diseases*, and he offered to serve on the editorial board and assist in any way he could.

Dr. Levine needed support for the fledgling project, and he got it from what might almost be called the parent of *Avian Diseases*, i.e., *The Cornell Veterinarian*. The covers, aside from the titles, were virtually identical (Figure 4) and the first three volumes of *Avian Diseases* were published by *The Cornell Veterinarian, Inc.* in Ithaca, NY. using the same business managers (Dr. John Whitlock, then Dr. Guy Morse). A group of Associate Editors aided in the production of the journal – Drs. Dorsey Bruner (from Cornell), Harold Chute (Maine), Robert Gentry (Pennsylvania), Morris Cover (Delaware), Erwin Jungherr (Connecticut) and Henry Van Roekel (Massachusetts).

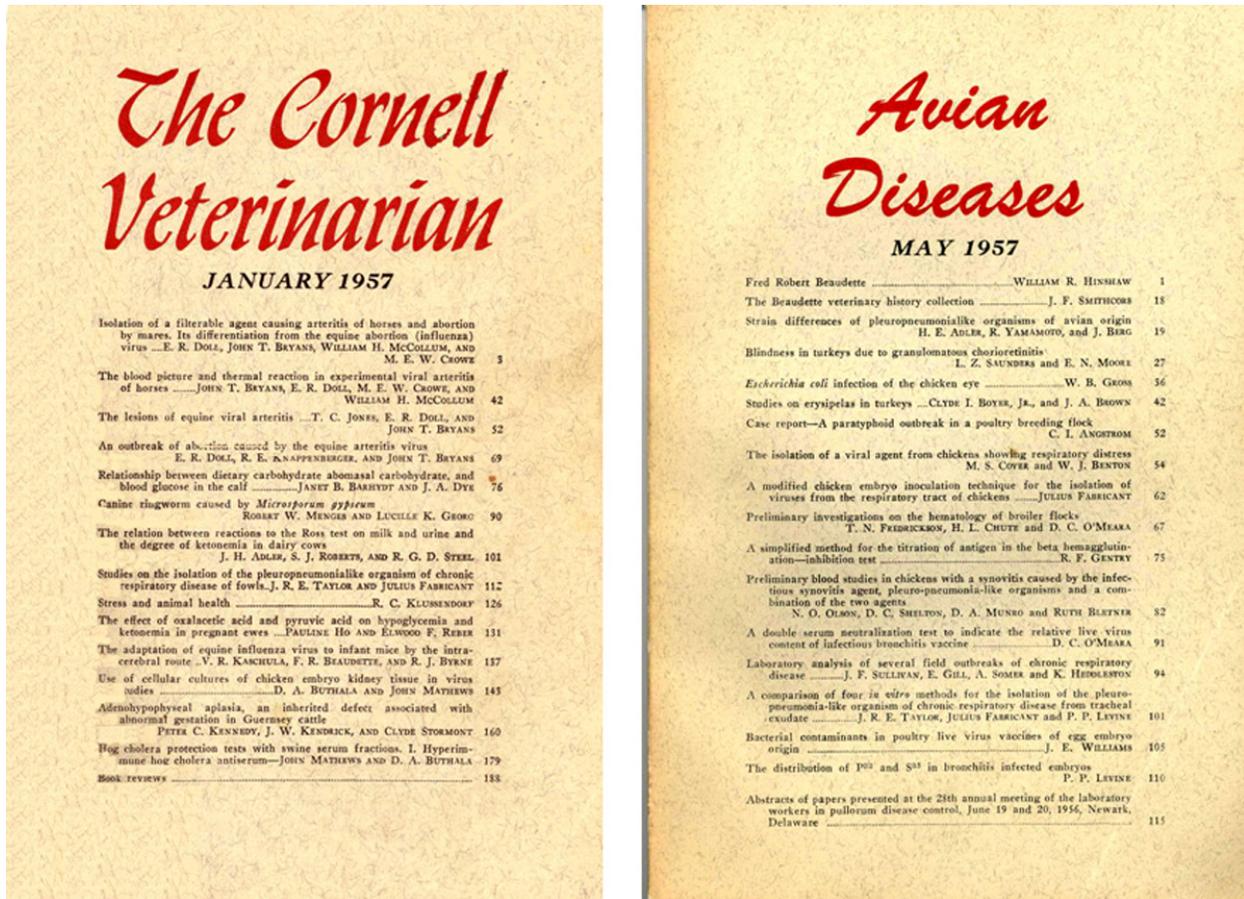


Figure 4 - The covers of *The Cornell Veterinarian* and *Avian Diseases* were almost identical

Assembling papers for the first issues was no mean task. Dr. Levine drew heavily on his own team. In addition to a tribute to Dr. Beaudette, whose illness and untimely death preceded the publication of the first issue, there were 14 research papers and 1 case report. Of these, 6 (40%) were from the Cornell team! Also, he had to wield a heavy hand editorially to get the first issues off the ground. The author of this account was a graduate student at the time, with a small laboratory adjacent to Dr. Levine's office. There was a connecting door (always open) between the two and this provided an opportunity to see him at his desk (Figure 5) where he cut and



Figure 5 - Dr. Levine at the desk upon which *Avian Diseases* was “born”

pasted up copy to show the printer just how he wanted the pages to look. He admitted that to make sure that schedules were met, he sometimes “helped” an author with a bit of “rewriting” rather than send a manuscript back for a time-consuming revision. It was truly a one-man operation! Thus, the journal was launched, at the grand cost to subscribers of \$5.00 per year (\$7.00 overseas).

After 3 years, it was time for the journal to leave the cosy nest that *The Cornell Veterinarian* had provided. It was not entirely coincidence that the fledgling organization called the American Association of Avian Pathologists (AAAP) was on hand to take the reins. The need for a home for *Avian Diseases* was one of several stimuli for the formation of the AAAP since one objective was “to encourage the publication of a scientific journal on avian diseases.” As noted by Drs. Leland Grumbles and Charles Hall in their recounting of the first 30 years of the AAAP (*Avian Diseases* 32:175, 1988), the histories of the AAAP and *Avian Diseases* were closely

intertwined. They pointed out that “It was fortunate for the AAAP that this journal was offered to the association. It was equally fortunate that the AAAP was available to take responsibility for the new journal”. Indeed, the citation issued by the AAAP when they awarded Life Membership to Dr. Levine stated: “The fact that *Avian Diseases* needed sponsorship after gaining a strong foothold was one of the key motivating forces behind the creation of the AAAP.”

The second issue of Volume 4 in 1960 was the first in which editorial changes were in place following the transfer of publication responsibilities to the AAAP. P. P. Levine remained Editor and Arnold “Rosy” Rosenwald was named Assistant Editor. The policy of having several (mostly new) associate editors remained until August, 1961 after which there was only a single associate editor (Dr. Grumbles from 1961-66, and Dr. Robert Gentry from 1968-71). Handing over of the “business reins” occurred during the summer of 1960 when Dr. Morris Cover, the Secretary-Treasurer

of the AAAP, was appointed Business



DR. AND MRS. P. P. LEVINE

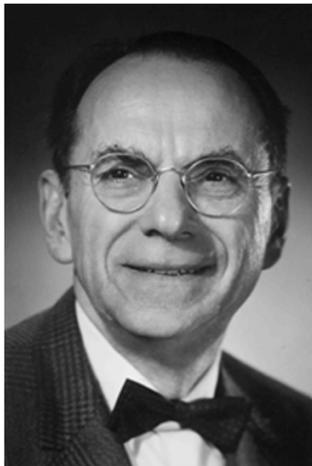
In dedicating this issue to Dr. and Mrs. Levine and designating P. P. Levine as Honorary Lifetime Editor, the American Association of Avian Pathologists pays tribute to the devotion and vision that made this journal possible.

Figure 6 - Issue dedicated to Dr. and Mrs. Levine

Manager. Thus, a new era for the journal had begun.

Several changes in structure and stewardship occurred soon after the transfer. In February 1961, Dr. Rosenwald assumed the editorship, Shortly thereafter, Dr. Grumbles was named

Associate Editor and the group formerly called Associate Editors became known as the Editorial Board. Recognizing Dr. Levine's enormous contribution in establishing a successful journal, the AAAP dedicated the August, 1961 issue to him and to his wife, Selma, who encouraged and assisted him (Figure 6). They further honored him by designating him Honorary Lifetime Editor. The editorship after Dr. Rosenwald stepped down was subsequently passed on to Drs. Leland Grumbles (1967), David Anderson (1974), Louis van der Heide (1994) and Jagdev Sharma (2004) (Figure 7)



P. Philip Levine



Arnold Rosenwald



Leland Grumbles



David Anderson



Louis van der Heide

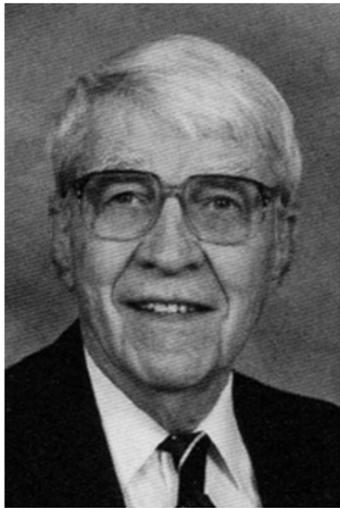


Jagdev Sharma

Figure 7 - Editors of *Avian Diseases*

Over the years, the journal has undergone a number of changes. Leland Grumbles assumed the

editorship in 1967, with Robert Gentry as Associate Editor. Subsequently, David Anderson (in 1974), Louis van der Heide (in 1994), and Jagdev Sharma (2004) became Editors. The position of Associate Editor was dropped in 1972. The practice of having the Secretary/Treasurer of the AAAP serve as Business Manager of *Avian Diseases* continues to the present. Those who followed Dr. Cover included Drs. Glenn Snoeyenbos (1961), Charles Hall (1970), Robert Eckroade (1982) and Charles Hofacre (2003) (Figure 8).



Morris Cover



Charles Hall



Glenn Snoeyenbos



Robert Eckroade



Charles Hofacre

Figure 8 - Business Managers of *Avian Diseases*

What can we say about the journal since the early years? How has it changed? What has it contributed and what are its particular strengths? What is its place in today's scientific world? A

brief look at some of the major changes gives a sense of just what Dr. Levine's "gift" has meant to our chosen field of avian medicine.

The Rosenwald era (1961-66). Dr. Rosenwald provided the author with a few comments about his tenure as Editor. In his words: "it all started when I was in Ithaca on a sabbatic leave and Dr. Levine asked if I would, or could, do the job." He said he would not have taken the job except for the promise of help from Kelvin Deming, a professional editor for the University of California, Davis veterinary group. Rosy also noted that P. P. Levine continued to be very helpful: "I would not have succeeded at all without P. P. Levine."

The Grumbles era (1967-73). Leland Grumbles, at Texas A&M University, served as Editor from February, 1967 through the end 1973. Few changes were made during that period. He commented that the arrangement he followed was that all papers went through both reviewers and Kelvin Deming before being sent to Ithaca for printing and mailing. Lee also noted that Deming was not thrilled one morning when he called him right after he arrived at his office at the usual time, *i.e.*, 8:00 am, forgetting the time differential. Two Special Issues of *Avian Diseases* were published during Grumbles' tenure. The first, "Neuroanatomy of the Domestic Fowl – "*Gallus domesticus*," (1969), consisted of a work started by Erwin Jungherr and polished up for publication by Charles Helmboldt. It was a distinct issue, not part of Vol. 13. The second, entitled "Control of Marek's Disease," was published as the first issue of Volume 16 in 1972. It consisted of the proceedings of a symposium on the control of Marek's disease held during the AVMA meeting in Michigan.

The Anderson era (1974-93). David Anderson held the editorial position for a full 20 years, until the end of 1993. Shortly after he took over, Kelvin Deming died but Kelvin's wife and daughter and, later, his daughter's husband, continued to assist with the editing. Dave relied heavily on his editorial board, noting that "it took me a while to learn the reviewers – their capabilities, likes and dislikes, *i.e.*, subject matter and/or colleagues." One review he received, which was especially memorable, included the statement, "this manuscript is replete with inexactitudes." The size of the journal changed from 6 x 9 to 7 x 10 inches in 1986. Unquestionably, the journal thrived under Dr. Anderson's leadership.

A third Special Issue of *Avian Diseases*, the Proceedings of the Fifth International Symposium on Avian Influenza, was published during Dave Anderson's tenure as Editor, but with special "Guest Editors," D. E. Swayne and D. L. Suarez.

The van der Heide era (1994-2003). Louis van der Heide, certainly the tallest of the editors (it could be said that he was literally head and shoulders above Rosy), served for the period of 1994-2004, following much the same approach as his predecessors. The new era of electronic delivery and processing had not yet arrived for *Avian Diseases*, which meant that all manuscripts were received by mail, and then were sent to two reviewers who would return their comments by mail

within a few weeks. Publication was timely and most manuscripts were in print within 6 to 10 months. Louie noted that there was an increase in international submissions during his tenure,

making the journal more of a world-wide publication.

The Sharma era (2004-present). Coincident with the appointment of Jagdev Sharma as Editor, the *modus operandi* and the face of *Avian Diseases* changed drastically. It adopted an entirely new cover format and size. Thus, the first issue of Vol. 49 had a glossy white cover graced with a photograph of P. P. Levine, the journal’s founder (Figure 9). Also, it carried the phrase “An international journal dedicated to avian health.” The only feature kept from the old format was the red script lettering of the journal’s title.

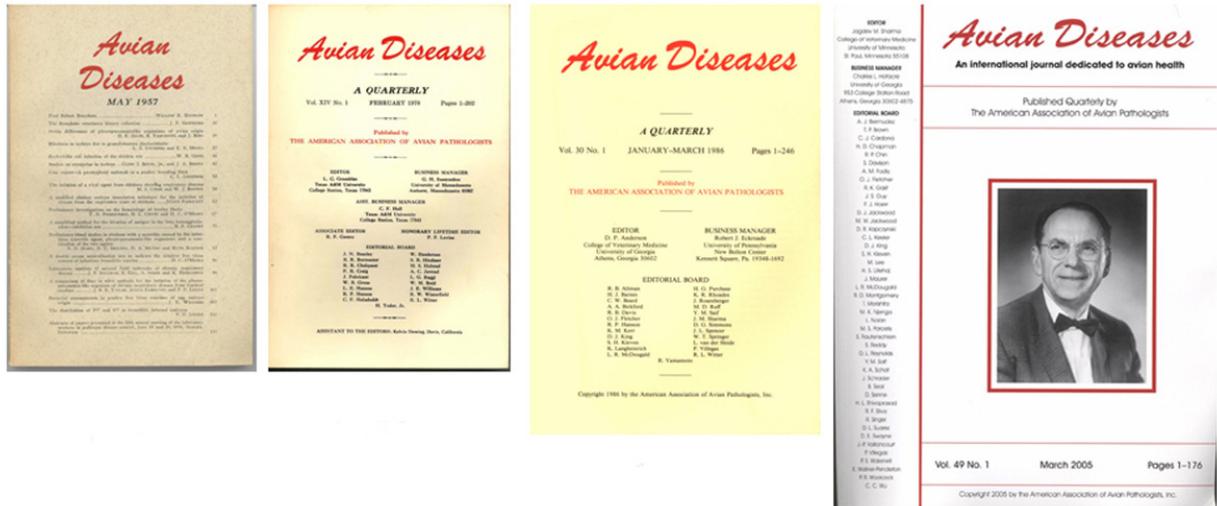


Figure 9 - The changing face of *Avian Diseases*: left to right: Volumes 1, 14, 30 and 49

A very significant change was the switch to electronic submission and review to bring the journal into the modern world and help reduce the publication time for articles. Yet another bit of evolution was seen in the addition of an Advisory Board, international in makeup, appointed by the AAAP Board of Directors for 5-year terms. One of their first tasks after Jagdev took the reins at the end of 2004 was to develop a Mission Statement for the journal. This statement recognized the unique nature of the journal in that it serves both the scientific community and the industry. The new statement now appears inside the front cover of the journal and it emphasizes that it is an international journal publishing both original basic research and clinical research with the ultimate mission of enhancing scientific knowledge and promoting avian health. The truly international flavor to our journal is reflected in the origin of papers. A recent issue had a total of 31 papers and reports, of which nearly 40% came from 10 countries in Europe, South America, Africa, and Asia. To help improve the “impact factor” of the journal, invited mini-reviews are

being included with each issue. According to *Science Watch*, vol 16, 2005, *Avian Diseases* was the 9th most cited among 150 veterinary journals surveyed.

The cost of subscriptions by this time had reached \$160/year, thirty-two times its original cost. In the mid 1960s, costs began to threaten the journal and it was ultimately agreed to increase subscription prices and, very significantly, to solicit help in the form of “sponsors,” *i.e.*, companies who directly financed the publication of a number of papers. Currently, the funding of the journal relies on page charges, “contributing supporters,” and paid advertisements. Recently, classified ads have been added to the mix. This, is a far cry from the original underwriting provided by *The Cornell Veterinarian*.

The P. P. Levine Award. Dr. Levine, in keeping with his desire to provide a strong forum for the dissemination of information on avian diseases, suggested that the journal promote excellence in manuscripts by making an annual award for the most outstanding paper published during the year. The AAAP Board of Directors concurred and, in 1964, an award of \$100 was made to Walter Hughes for the paper on the development of a leukosis-free flock of chickens. The award was later named in honor of Dr. Levine and the monetary reward was subsequently raised to \$1,000. Interestingly, 10 of the 42 awards to date were for papers on which Dr. Levine’s graduate students were a senior or junior author. It would seem that maybe something rubbed off. In any case, the recognition of good work and good reporting is important for the journal and it serves as a tribute to its founder.

Summary. This review offers a sense of the origin, the evolution through adaptation, and the fundamental changes in our journal that reflected the needs of our profession. Had it not been for Dr. Levine’s foresight, canny instincts, superior scientific credentials, editorial acumen, and a large measure of hard work, the journal might not have gotten off the ground. Further, had it not been for the support of many, many colleagues, and especially the timely adoption of the journal by the fledgling AAAP, it might not have survived. Its success is the direct result of the support of contributing scientists from all over the world, the dedication and hard work by the editors, their assistants and reviewers, and acceptance of the journal as a significant publication by the entire scientific community. It should be abundantly clear to us all that Dr. Levine’s dream was brilliant, and the journal remains highly viable as a result of timely evolutionary changes.

Figure Legends

Figure 1: Dr. P. Philip Levine’s Cornell Veterinary College graduation photo (1932)

Figure 2: Dr. Levine providing “pointers”

Figure 3: Coccidiosis research spanned Dr. Levine’s career

Figure 4: The covers of *The Cornell Veterinarian* and *Avian Diseases* were almost identical

Figure 5: Dr. Levine at the desk upon which *Avian Diseases* was “born”

Figure 6: Issue dedicated to Dr. and Mrs. Levine

Figure 7: Editors of *Avian Diseases*

Figure 8: Business Managers of *Avian Diseases*

Figure 9: The changing face of *Avian Diseases*: left to right: Volumes 1, 14, 30 and 49