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TRIBUTE

Paul Henry Latimer (1925–2011): discoverer of selective scattering in photosynthetic systems

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Abstract We provide here a brief tribute to Paul Henry Latimer (November 25, 1925 to October 1, 2011), a dedicated biological physicist, discoverer of selective scattering in biological systems, a wonderful teacher, husband, and father. We provide here a glimpse of his personal and professional life, including reminiscences from F. Dudley Bryant, Dan A. Cross, Bobby E. Pyle, Bryan L. Seiber, and Bruce A. Seiber.

This Tribute was edited, and approved for publication in Photosynthesis Research by Barbara Demmig-Adams and William W. Adams III. Demmig-Adams added: "It is yet another piece that highlights the well-rounded and caring person behind the innovative scientist, and the personal relationships that contribute to ground-breaking science."

For tributes to some others who worked in the "Photosynthetic Unit" of Robert Emerson and Eugene Rabinowitch, see Hagar et al. (2011) for Tom Punnett (1926–2008), Hirsch et al. (2010) for Steve Brody (1927–2010), and Govindjee and Pulles (2016) for Lou Duysens (1921–2015).

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Early life

Paul Henry Latimer, born on November 25, 1925, in New Orleans, Louisiana, was the only child of Frieda Julia Hildebrandt and Claiborne Green Latimer, a faculty member in the Department of Mathematics at Tulane University. Paul spent his childhood in Lexington, Kentucky, after his father joined the faculty at the University of Kentucky.

While Paul was in high school, World War II broke out, an event that had a profound impact on him. He often recounted his memories of Pearl Harbor Day (December 7, 1941), having come home from delivering heavy Sunday newspapers and hearing the radio reports of the bombings. Paul graduated from high school in June 1943 and enrolled at the University of Kentucky. Eight months later (February 1944) he was drafted into the war effort by the United States Army, where he served until June 1946, including 17 months in the European Theater. During that tour, he was awarded the Bronze Star and a Purple Heart.

When Paul returned from his Army duties in June 1946, he re-entered the University of Kentucky, but transferred to Northwestern University (in Evanston, Illinois) in 1947. He graduated from Northwestern with a BS degree in Physics in June 1949. He then enrolled in graduate school at the University of Illinois at Urbana-Champaign (UIUC), earning an MS degree in Physics in October 1950. During the 1950–1951 academic year, he served as an Instructor in Physics at The College of William and Mary, Williamsburg, Virginia. In May 1951, he was awarded a Pre-doctoral Fellowship by the Atomic

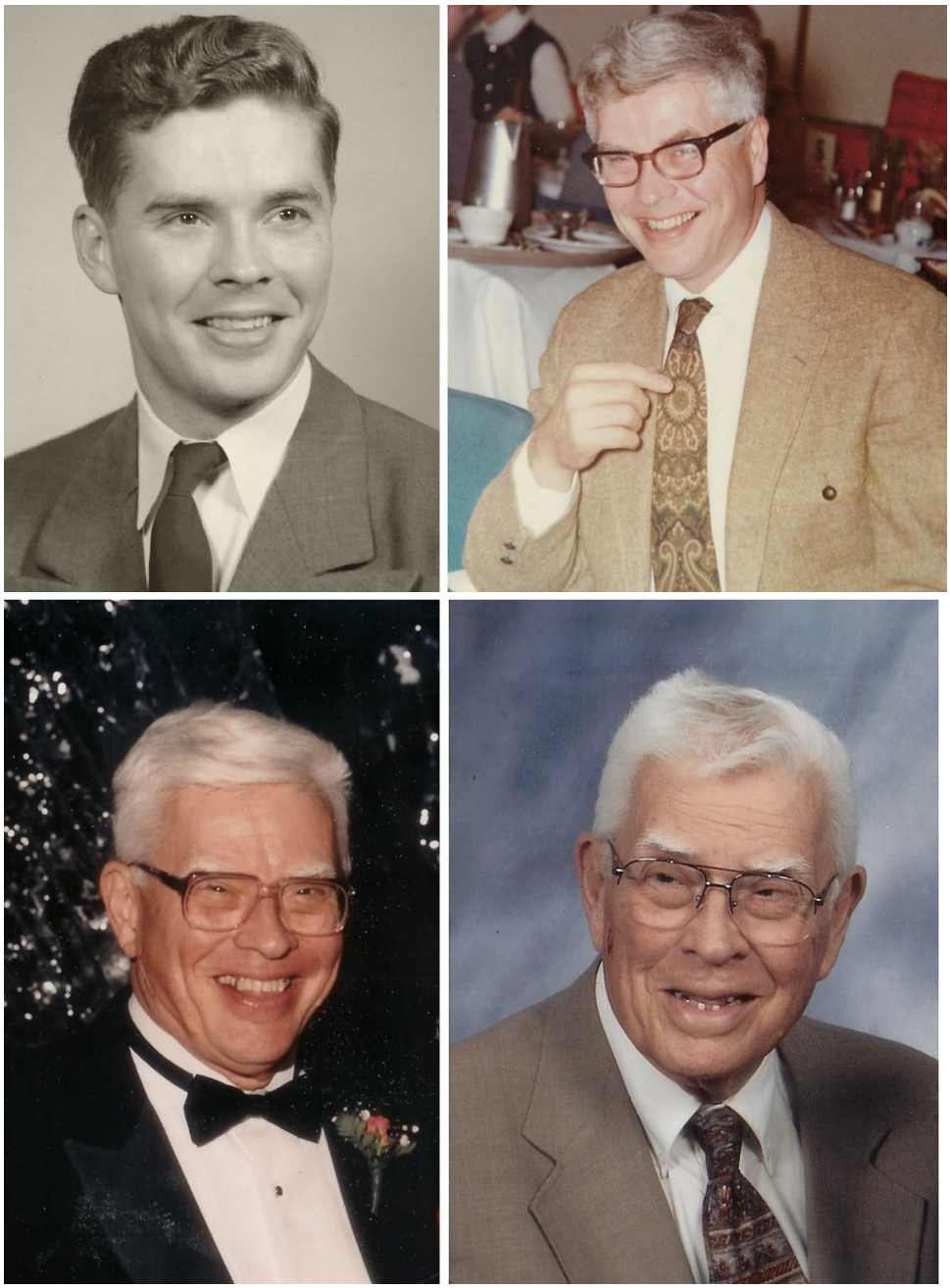

Fig. 1 Selected portraits of Paul H. Latimer over the years: 1953 (*top left*); 1972 (*top right*); 1983 (*bottom left*); 2011 (*bottom right*). *Source* Archives of the Latimer family

Energy Commission to study Photosynthesis in "Physico-Chemical Biology," a program in the Graduate College at UIUC, and began his studies in the fall of 1951. During this time, his parents had relocated to Atlanta, Georgia, where his father took a position in the Department of Mathematics at Emory University. Figure 1 shows four portraits of Paul Latimer at different times of his life.

Professional career

Paul's interest in photosynthesis was sparked and nurtured during his time at UIUC as a result of many discussions with Robert Emerson (see Rabinowitch 1961; Govindjee 2004). That friendship would continue for years after Paul completed his studies at Illinois. Paul's research work

was guided by Eugene I. Rabinowitch (see Bannister 1972; Govindjee 2004); the title of his PhD Dissertation, in Physico-Chemical Biology, was "Fluorescence and Scattering of Light by Plant Pigments" (Latimer 1956). His PhD committee members were Emerson, Rabinowitch, R.D. Rawcliffe, James N. Snyder, and Sol Spiegelman. Research colleagues from this time, including Thomas (Tom) T. Bannister, Steven (Steve) S. Brody, and Marcia Brody, became lifelong friends (see Brody 1995, 2002; also see below). For help on his thesis, Paul thanked, besides Eugene Rabinowitch, R.D. Rawcliff, Robert Emerson (who helped him with design and execution of experiments), T.T. Bannister (coauthor of his quantum yield of fluorescence work; see below), and the following: the Nobel laureate James Franck (see Rosenberg 2004), Ruth Chalmers (Emerson's associate), A. Stanley Holt (Rabinowitch's associate), Lou N.M. Duysens (see Govindjee and Pulles 2016).

Paul's PhD thesis included studies in two distinct research areas, both related directly or indirectly to the primary events in photosynthesis: the first dealt with the quantum yield of fluorescence (Latimer et al. 1956, 1957) and the second with selective scattering in algal cells (a novel discovery). On page 72 of his thesis, Latimer (1956) wrote "I have observed a strong spectral selectivity in the scattering of light by pigmented cells. Sharp scattering maxima occur on the long wavelength side of absorption bands." Paul eliminated the possibility of this phenomenon as an artifact from chlorophyll fluorescence, and discussed its relation to the classical theory of dispersion, changes in refractive index, Mie's theory of scattering, and the well-known Raleigh scattering.

A perspective of the time period when Paul was a graduate student in the Emerson-Rabinowith Lab, as recalled by one of us (TTB), is given in the next two paragraphs.

In September 1951, both Paul and Tom began graduate study in the Photosynthesis Lab at Urbana. But the two differed much in years, experience, and academic qualifications. By then Paul was 26, had served as forward artillery spotter in Europe in WWII, had returned to finish bachelor and master degrees in physics, and served a year as an instructor at The College of William & Mary, Williamsburg, Virginia. TTB had a newly minted bachelor of botany degree from Duke University, Durham, North Carolina, and otherwise inexperienced. What enticed Paul away from a PhD in Physics to a PhD in Physico-Chemical Biology (as it was called then; later Biophysics), Tom never exactly knew. What drew Tom to the Urbana lab was clear: Robert (Bob) Emerson's speech as a recipient of the 1950 Stephen Hales Prize by the American Society of Plant Physiologists (now called American Society of Plant Biologists) in Columbus, Ohio. This speech showed how much an understanding of photosynthesis might be advanced by careful and insightful application of the theory and equipment of physics. In the 20 months ending in May 1953 (when TTB was drafted), Paul and he became friends, and Paul became a mentor teaching Tom the use of optical equipment including light sources, filters, thermopiles, photomultipliers, and their power supplies (in those days, often battery packs). Tom remembers well Paul's integrating sphere (~16–18 in. in diameter), with fittings for a photomultiplier, entry of light from a monochromator, for support of cells of sample and "blank," and for a baffle to prevent "unmixed light" from reaching the photomultiplier directly. The interior was plastered with $BaSO_4$, then smoked with MgO. During this period TTB had the pleasure of attending Paul's wedding to Margaret in August 1952 in Clemson, South Carolina. A year and a half later Paul and Margaret stood as best man and bridesmaid at Tom's marriage to Mary Jeanne Hoggard in Tulsa, Oklahoma. We note that in June 1955, after completing service at Ft. Detrick, Frederick, Maryland, TTB returned to the Photosynthesis Lab to begin his PhD study under Eugene Rabinowitch. At that time and continuing until June 1956, Paul and Tom again inhabited the Lab together. But Paul was busy writing his dissertation, and TTB, by then more savvy and independent, needed less of Paul's mentoring.

Paul completed his PhD in spring 1956 and in June began a 2-year post-doctoral appointment at the Carnegie Institution of Washington (CIW) in Stanford, California. From that point forward, the meetings of Tom with Paul became rare. Tom recalls a weekend visit to Nashville, Tennessee, and Paul's lab at Vanderbilt University. And some time in the late 1960s around Christmas, Tom and Mary Jeanne were overnight guests of Paul and Margaret in their home in Auburn, Alabama. Over all the years since, cards were exchanged at Christmas, but the two did not see each other socially or join in shared scientific interests. Tom now regrets not keeping up with Paul's contributions and publications. During the 1990s, Tom was very much interested in the depth-dependence of phytoplankton photosynthesis in fresh and marine waters. Well-known is the modulation of spectral irradiance with depth, in turn dependent on the spectral absorption coefficient and on the "angular scattering function" of the water. Widely cited measurements of the latter function were those of Petzold (1972) for very clear marine water. TTB now asks: "Might Paul's work … have something to say about the shape of Petzold's functions, or about how the function might differ in water made milky by a bloom of a coccolithophoric alga?"

Figure 2 shows a 1956 photograph of Paul Latimer with Robert Emerson and others including one of us (Govindjee).

In June 1956, with his PhD in hand, Paul moved his family to Palo Alto, California where, as a post-doctoral associate at the CIW, he continued and published much of his thesis work, particularly on selective scattering (Latimer 1958,

Fig. 2 A 1956 group photograph in Urbana, Illinois. *Left to right* Robert Emerson, Mary-Jo Lavorel (wife of Jean Lavorel), Ruth Chalmers (research assistant of Emerson), Govindjee (then a PhD student of Emerson and Eugene Rabinowitch), Jean Lavorel (visiting postdoctoral fellow from France), and Paul H Latimer; the two children held by Emerson and Govindjee are those of the Lavorels. *Source* Archives of the Govindjee family

1959; Latimer and Rabinowitch 1959). Upon completion of his work at CIW, he moved to Nashville, Tennessee, where he worked in the Physics Department at Vanderbilt University as an Assistant Professor from 1958 to 1962. Here, with several others, he did an analysis on a totally different topic: the behavior of indicator fluids injected instantaneously or continuously into heart chambers (McClure et al. 1959).

In 1962, Paul Latimer accepted a faculty position in the Physics Department at Auburn University in Auburn, Alabama, where he stayed for the remainder of his professional career. He taught, conducted research, and guided numerous graduate students in his favorite field of light scattering, as seen by the impressive list of his publications (see, e.g., Bryant and Latimer 1969; Bryant et al. 1969a, b; Cross and Latimer 1970, 1972; Latimer and Crouse 1992; Latimer and Pyle 1972; Latimer and Tully 1968; Latimer et al. 1968, 1978; Moore et al. 1968; Pyle et al. 1979; Seiber and Latimer 1967). He always reveled in receiving reprint requests from scientists working around the world.

In 1963, Paul, now Associate Professor, hosted Nitish K. Sanyal to come to Auburn University as a Research Associate in the Auburn Physics Department. Nitish had been Assistant Professor of Physics at the University of Gorakhpur, India. He had also served as research assistant for the Indian Association for Cultivation of Science in Calcutta. A brief article in the Birmingham (Alabama) Post Herald newspaper, dated May 14, 1963, described the Latimer-Sanyal research work as follows:

> The study, among the few of its kind in the world, involves research in light scattering by biological cells, where experiments are carried out on light absorbing materials with special spectrophotometers. Through interpretations of the results in terms of physical theories, researchers hope for a breakthrough toward more basic knowledge of biological systems and their functions.

A glimpse of Paul's research during the 1960s is provided below. During this period, he extended his research area into making a device to reduce irradiation to improve dental film quality (Medwedeff et al. 1962). However, his main emphasis was in going deeply into the question of selective scattering, the topic of his PhD thesis. To understand his extensive contributions in this important area, it is best to consult the following papers: on anomalous dispersion (Latimer 1961; Allen and Latimer 1962); on universality of selective scattering (Latimer 1963) in red blood cells (MacRae et al. 1961), in chloroplasts and cells (Prickett et al. 1963; Bryant et al. 1969a), and in yeast cells (Latimer and Tully 1968). Further, he introduced new methods and theory related to the above topics (Latimer and Holmes 1962; Latimer et al. 1965, 1968; Latimer 1967; Seiber and Latimer 1967; Moore et al. 1968; Bryant and Latimer 1969; Bryant et al. 1969b).

During the 1970s, focus on newer methods and theory took a deeper turn (Cross and Latimer 1970, 1972; Latimer 1972a, b, 1975a, b, c, 1978, 1979a; Latimer and Pyle 1972; Latimer and Barber 1978; Latimer et al. 1978), and work on yeast cells continued (Pyle et al. 1979). During this period, the teacher in him prompted him to write engaging articles in *The Physics Teacher* entitled "A Bouncing Superball—The Poor Man's Projectile" (Latimer 1977); and "Do the leaning tower experiment with one hand!" (Latimer 1979b).

In 1974, Paul had an opportunity to work with G.V.R. "Gus" Born and Frank Michal at the University of London, England, and again later when Born moved to Cambridge University, England. Latimer's collaboration and publications on the use of light scattering to study blood platelets

impacting heart disease continued for years (see, e.g., Latimer et al. 1977).

In the 1980s, Paul's research on newer methods and theory continued, most often single-handedly and in depth (Latimer 1980, 1983a, b, c, 1984a, b, c, d, 1985; Latimer and Wamble 1982; Bryant and Latimer 1985; Latimer et al. 1985; Latimer and Noh 1987). In addition to "selective scattering," for which Paul is best known, there is another optical phenomenon known as the "sieve effect" where some light just passes through without absorption because "pigments" are in "stacked" regions, and this causes "flattening" of the absorption band (see, e.g., Duysens 1956; for details, see; Das et al. 1967). We note that it was Latimer (1983a) who made improved corrections for this "sieve effect." Further, during this period, Paul's research culminated in a major authoritative review in the Annual Reviews Series (see Latimer 1982).

Paul retired from Auburn University in 1991 but continued to conduct lab experiments and publish as a Professor Emeritus for several years. During this time, he initiated work on what is called the Talbot Effect. To understand this interesting effect, it is best to read the following papers, mostly in the area of applied optics: Latimer (1993a, b, c, 1994) and Latimer and Crouse (1992) as well as some basic definitions available on-line on this topic (https://en.wikipedia.org/wiki/Talbot_effect).

Reminiscences by Paul's students/associates

F. Dudley Bryant (Western Kentucky University; e-mail: dudley.bryant@wku.edu) wrote:

> When I was a Physics undergraduate student at Duke University, Durham, North Carolina, working in Hertha Sponer's lab for Dr. Hedwig Kohn, I had applied to work with Paul Latimer at Vanderbilt University, Nashville, Tennessee, for my MS/PhD. Paul interviewed me on an Easter Sunday afternoon. As soon as I returned to Duke, Sponer told me "You are going to Vanderbilt; period; no discussion." So, I enrolled there in the fall of 1961. Also, I cannot forget that James Franck, husband of Sponer, who was a 1925 Nobel Laureate[1] of Physics, told me that Paul Latimer was the best experimental scientist he had known. In 1962, Latimer moved to Auburn University in Auburn, Alabama, and I moved with him. I do remember one thing: the equipment I was using for my research went to Auburn under the Latimers' dining table!
>
> Paul Latimer was a very focused person: during discussions with us, he would shut out everything else; his power of concentration was unmatched, and he cared for his students. One day, during the final phase of my PhD thesis work, he said "You are winning most of the discussions about your research; it is time for you to graduate." (see Bryant and Latimer 1969, 1985; Bryant et al. 1969a, b; Latimer et al. 1965, 1968; Moore et al. 1968; Prickett et al. 1963).
>
> I end my reminiscence by recalling an incident that has stuck in my mind: During the last part of my thesis, I had to work until 2 or 3 AM in order to have access to the much-needed computer. Thus, I would not get back to the Lab until 10 AM. One morning the lab phone rang at 8 AM, and the prospective employer calling asked to speak to me. Well, Dr. Latimer said, "Dudley? 8 O'clock? HaHa!" and hung up! What a quirky sense of humor! This was clearly not at all the end for me since he was always very supportive, and I am now Professor Emeritus of Physics & Astronomy at Western Kentucky University, Bowling Green, Kentucky.

Dan A. Cross (formerly at King University, Bristol, TN; email: crossdan@mac.com) wrote:

> My experience with Dr. Paul Latimer was always positive and relaxing. The first time I met him was August 1964 when I moved to Auburn University with my new bride, Becky. Paul had been a professor at Vanderbilt University (VU) before moving to Auburn, but I never had any acquaintance or a class with him.
>
> As an undergraduate at VU, I worked in the radiation chemistry lab with Master's degree students in *Health Physics* funded through the Atomic Energy Commission. I was hired to work under Dr. Dwight Bardwell who was a good friend of Dr. Ernie Jones, a VU Physics professor. After my BS graduation in *Electrical Engineering* (EE), Drs. Jones and Bardwell persuaded me to get a MS in health physics as well. Later Dr. Jones told me about a grant that his friend Paul Latimer at Auburn had just received. Dr. Jones called Dr. Latimer and, between the two of them, I became a student of Dr. Latimer. I never made any formal application; he simply sent Dr. Jones some forms for me to sign and my move became a done-deal. I wasn't privy to the conversation between Drs. Jones and Latimer, but Dr. Jones had the impression that, with an EE degree, I could help Paul with some of the electronics that he needed. Unfortunately, my EE concentration was in power and power distribu-

[1] For history, we note that this 1925 Nobel Prize was actually given to Franck and Gustav Herz in 1926 (see Von Hippel 2010).

tion and not electronics, so I think that Dr. Latimer was a little disappointed that I didn't have the electronics expertise that he had hoped.

In any event, Dr. Latimer pointed me toward researching the possibility of using electromagnetic scattering to determine the characteristics of cells. This developed largely into a computer science project where I was evaluating light scattering from cylindrical objects. In those days computer programming was a formidable task, but Dr. Latimer worked with me and encouraged me, I was able to succeed, and we published two very good papers together (Cross and Latimer 1970, 1972); he was always a source of help and encouragement.

My relationship with Dr. Latimer continued outside of the classroom. There were several times that he invited my wife and me over to their house for dessert, party, or even a meal. Sometimes, of course, his other students were also there. One meal I particularly remember was at Thanksgiving in 1966. Becky was 8 months pregnant with our first child and traveling 400^{+} miles, on a two-lane highway, to our home in Jonesborough, Tennessee, was out of the question. We were invited over for *turkey* and all of the trimmings and we really enjoyed it tremendously. Mrs. Margaret K. Latimer fixed a wonderful meal, and we thoroughly enjoyed spending time with Paul and all of his family.

Bobby E. Pyle (formerly of Southern Research Institute, Birmingham, Alabama, e-mail: bepyle@bellsouth.net) wrote:

I came to Auburn University in the fall of 1978 to pursue my PhD in Physics. I chose Dr. Latimer as my advisor because his research was close to Biophysics. We decided to solve Maxwell's equations for light scattering by an anisotropic sphere. Unfortunately, I ran in to a brick wall. I needed an approximation in order to reach a solution. In view of time constraints, I then switched to the experimental measurement of the "The effects of cell synchrony on light scattering properties of biological cells." For my publications with Latimer, see Latimer and Pyle (1972), and Pyle et al. (1979). Dr. Latimer was very patient with me and I will always be thankful. As to Dr. Latimer, I was always amazed as to how many books and papers he could stack on his desk (*horizontal filing*). For some reason, he decided to stop that practice. He cleaned off his desk and, in fact, inclined the back of the desk so things would only stay on the desk if very few things were on the desk. My wife says I learned the horizontal filing method too well, but then I learned from an expert. I greatly enjoyed my time at Auburn with Dr. Latimer and his family. They were very kind to me as well to the rest of my family.

Bryan L. Seiber (formerly with Arnold Engineering and Development Center, Arnold Air Force Base, Tullahoma, Tennessee; e-mail: seiberbl@lighttube.com) wrote:

I did optical research from 1961 to 1963 at Vanderbilt University, Nashville, for my MS thesis under Dr. Paul Latimer. Paul had a research lab on the seventh floor of the Vanderbilt Learned Lab, a building on the north side of the Vanderbilt Hospital. He had me studying the visible optical absorption spectrum of green plant cells, and of spinach chloroplasts; this work led to my thesis titled "The spinach chloroplast absorption spectrum between 400 and 800 nanometers."

Paul left Vanderbilt for Auburn University in 1962, and I made several trips to Auburn to finish some of my research. Paul encouraged my brother **Bruce A. Seiber** (of West Arlington, Minnesota; e-mail: jbseiber@gmail.com) to apply for a graduate scholarship at Auburn and Bruce ended up attending Auburn's graduate school and studying with Paul Latimer (see their published papers: Bryant et al. 1969a, b; Seiber and Latimer 1967).

I reproduce below a letter Paul sent to Dr. Wendell Holladay, Head of the Physics Department at Vanderbilt University, concerning my graduate degree completion. It shows his candid and detailed way of describing my work and me. The letter follows:

Dear Wendell,

I have just read the draft of Mr. Bryan Seiber's proposed M.S. thesis, which I discussed with you. This is to recommend acceptance of this thesis.

[Bryan] Seiber started work during the fall of 1961. He was well into it but did not have final results when I left Vanderbilt in September 1962. Since then he [has] completed most of the experimental work at Vanderbilt, although he did explore and conclude some significant parts of it in my lab here at Auburn University during, I believe, the spring of 1965. Last summer I passed blessings on a draft, with corrections, for a next-to-final typing. The latter is what just came through. I have gone over this and offered corrections, some editorial and some in content but all relatively minor. I fully approve the present draft for final typing and recommend its acceptance.

Seiber has done an excellent piece of work for an M.S. thesis and I personally have a high degree of confidence to its reliability. I also believe that these results have appreciable scientific significance. I am now going to draft a note, probably to be sent

Fig. 3 A photograph of Margaret Kinard and Paul Latimer, 1951–1952. *Source* Archives of the Latimer family

to Applied Optics, based on his work. Seiber's time schedule has nearly driven me nuts since there seemed to be a significant possibility that the thesis and degree would never become realities. However, he has come through in good style and has overcome handicaps created by my leaving Vanderbilt before the project was completed.

It was certainly good to see you and a number of other old buddies during the visit. It was also nice to see Physics at Vanderbilt so well housed.

I'll look forward to seeing you again in December.

Sincerely,

Paul Latimer, Associate Professor

cc: Dr. E.A. Jones

cc: Bryan Seiber

Personal life

Between his Master's degree studies and his PhD. research, Paul took the 1950–1951 academic year to teach and broaden his scientific perspective. He considered two offers, one from Clemson College (now Clemson University in Clemson, South Carolina) and one from The College of William & Mary, located in Williamsburg, Virginia. The Clemson offer was extended by Professor Marion Kinard, Dean of the College. Paul chose to turn down the Clemson offer and go to William & Mary. It was during that time in Williamsburg, Virginia, that Paul met, and later married, Professor Kinard's daughter, Margaret, who was working as an editor for *The William and Mary Quarterly*, a well-known historical journal. Margaret had finished her BA degree in English and History from Agnes Scott College in Decatur, Georgia, and her MA in history from Vanderbilt University, Nashville, Tennessee.

In the fall of 1951, Paul returned to Urbana to UIUC to start his PhD studies. He continued his relationship with Margaret through many phone calls between Virginia and Illinois. Paul and Margaret were married in Clemson in

Fig. 4 Paul Latimer and his family at a 2005 celebration of daughter Meg's 50th birthday. *Back row* (*standing left to right*): Monte Uzzell, Susan L. Uzzell, Phil Napoletan, Paul Latimer, Marianne L. Napoletan, and Joey Napoletan. *Middle row* (*sitting left to right*): Meg Latimer, and Margaret K. Latimer. *Front row* (*from left to right*): David Napoletan, and Ben Napoletan

Fig. 5 Paul's family gathered to celebrate his wife Margaret's 80th birthday in 2006. From *left to right* Margaret Latimer, Susan L. Uzzell, Paul Latimer, Meg Latimer, Ben Napoletan, Marianne L. Napoletan, Monte Uzzell, Joey Napoletan, David Napoletan, and Phil Napoletan. *Source* Archives of the Latimer family

August of 1952. Figure 3 shows a photograph of the couple at that time.

Paul and Margaret returned to Urbana where Paul was working in the *Photosynthesis Project* and Margaret had a job in the College of Engineering at UIUC. Their first daughter Margaret [Meg; one of us (MGL)] was born in Urbana in 1955, and went to work every day for 15 months with her mother until Paul finished his PhD in the spring of 1956. Paul and Margaret then had another daughter, Marianne, in 1957, while living in Palo Alto, California. And their third daughter Susan was born in 1960 while Paul was working at Vanderbilt University.

Retirement from Auburn University in 1991 allowed more time to pursue his many interests. Paul was a regular member of the local Kiwanis Cub (civic interests) and he routinely enjoyed a weekly game of golf. The Latimers were big sports fans, having season tickets to Auburn University football and basketball games. Paul was also a regular stop-watch timer at the Auburn University track meets. Paul and Margaret enjoyed travel and were proud of the long list of international locations they had visited on all the seven (7) continents.

In December 2009, Paul and Margaret relocated to the north Atlanta area to be closer to family. Paul passed away on October 1, 2011, just 6 weeks short of his 86th birthday. He is survived by his wife of 59 years, Margaret Kinard Latimer, 3 daughters—Margaret "Meg" G. Latimer [coauthor of this tribute (MGL)], Marianne L. Napoletan (and her husband Philip), Susan L. Uzzell (and her husband Monte), and 3 grandsons (Joseph M. Napoletan, David A. Napoletan, and Benjamin A. Napoletan).

We end this Tribute to Paul Latimer by showing two photographs of the family. Figure 4 is a 2005 photograph at daughter Meg's 50th birthday, and Fig. 5 is a photograph taken at the 80th birthday of Paul's wife Margaret.

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