



# Dr. Louis Tompkins Wright: A Medical Pioneer from Harvard Medical School a Golden Life Worth Telling, a Silver Lining During Cloudy Times

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**DR. LOUIS TOMPKINS WRIGHT:  
A MEDICAL PIONEER FROM HARVARD MEDICAL SCHOOL  
A GOLDEN LIFE WORTH TELLING, A SILVER LINING DURING CLOUDY  
TIMES**

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This paper provides a birds-eye view of Dr. Louis Tompkins Wright, someone whose life is worth to be told.

Dr. Louis T. Wright graduated fourth in his class from Harvard Medical School in 1915. This auspicious beginning to his formal entrance into the medical profession would be the harbinger of an immensely, albeit cut short, career in medicine.

Dr. Wright was also a distinguished soldier displaying bravery in combat during World War I. Earning a Purple Heart Medal did not prevent him from returning to combat-imbued areas in wartime occupied France. Moreover, while in the military, Dr. Wright was the pioneering researcher who experimented successfully with the first intracutaneous vaccine of smallpox.

Among many other achievements, it is worth noting Dr. Wright's pioneering work performed in relation to eventual FDA approval of an antibiotic — aureomycin the so called "Golden" or "Miracle" antibiotic that had anti-viral properties— first tested on humans through his experiments in Harlem Hospital.

Wright was reportedly a pioneer in, if not the first doctor, in the efforts to demonstrate that chemotherapy could have a significantly-positive effect in the fight against cancer tumors. Moreover, Dr. Wright successfully demonstrated that the Schick test could be performed on African American and persons of dark skin who had previously been the object of exclusion from this test designed to diagnose and treat diphtheria, a contagious bacterial disease that produces the progressive deterioration of the myelin sheaths within the central and peripheral nervous system.

While struggling against the greater obstacles facing someone like himself who was the son of a woman who had been born a slave, Dr. Wright was a distinguished civil rights leader who worked tirelessly in his efforts to end racially-based segregation in the United States, becoming the first African-American to become Chairman of the Board of the National Association for the Advancement of Colored People (N.A.A.C.P.).

As leader of the NAACP from 1934 until just before his untimely death in 1952, Dr. Wright served as an energetic although serene beacon and wise rudder for an organization that would do so much to advance the principles of equal rights for all races, due process in the court system, desegregation and

free access to participate in electoral campaigns and voting and equal access to health services.

The paper states that Louis T. Wright's achievements, only some of which are summarized or expounded on as they are so vast, should lead to a greater interest and more enthusiastic study of this historic and pioneering figure that should tower as an example for Harvard University students and beyond the walls of this great university.

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## LOUIS TOMPKINS WRIGHT: A MEDICAL PIONEER FROM HARVARD MEDICAL SCHOOL

“Of all the forms of inequality, injustice in healthcare is the most shocking and inhumane.”

- Martin Luther King, Jr.<sup>1</sup>

### I. INTRODUCTION

On a day where events were looking each day as if another Great War was growingly more difficult to avoid, while a British destroyer intercepted the *Columbus* -a German passenger liner- 450 miles east of Cape May, New Jersey, eventually forcing the *Columbus* to be scuttled, the President of the University of Newark, expressed some moving words that are still true to this day, about “A Patriot and Physician”:<sup>2</sup>

This is a story of a doctor [...] as true an American as you will find in this wide continent [...] Tonight he is very ill, the result of having been gassed in the [First World] war and overworked since. I do not know whether or not he is well enough to listen to what we say, but I do know his story is good enough to be told.<sup>3</sup>

The crux of this paper revolves around the principle of enthusiastic passion to further good causes, with particular interest in the area of major contributions to

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<sup>1</sup> Quoted in Dayna Bown Matthew, *A New Strategy to Combat Racial Inequality in American Health Care Delivery*, 9.1 DEPAUL JOURNAL OF HEALTH CARE LAW 793 (2005).

<sup>2</sup> *Classic Liners of Long Ago*, available at <http://classicliners.nicholaswwilson.com>.

<sup>3</sup> Edward Sidney Jenkins, TO FATHOM MORE: AFRICAN AMERICAN SCIENTISTS AND INVENTORS 211 (1996).

medical research and practice that helped save and ameliorate pain and illness for countless of persons, something that rubbed off on most —and probably *all*— from a wonderful course we took this past Winter Term, which is now even commented on a video on the Internet, apparently placed by an attorney who reports she had the very unusual opportunity to write her thesis on “The Constitutional Right to Use Drugs”.<sup>4</sup>

The driving force of this paper is summarized in tight synthesis as well as can be explained —albeit I would include both young, middle-aged and older persons who as even beyond a century can contribute— when Maya Angelou states:

It is imperative that young people be told that we have come a long way, otherwise they are likely to become cynical. A cynical young person . . . means that he or she has gone from **knowing nothing to believing in nothing**. (Emphasis supplied).<sup>5</sup>

That, I may add, is what I perceive to be the most dangerous and painful civic, intellectual or spiritual tragedy that may befall a young lawyer or, for that matter, any human being.

A wonderful and inspiring life may contribute to eschew cynicism and promote a sense of enthusiastic civic commitment. There is a plethora of great and heroic, albeit relatively anonymous contributors, whose lives are not as well known as

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<sup>4</sup> See Video of Attorney Allison Margolin, <http://www.youtube.com/watch?v=L-QzZCc1sJg>.

<sup>5</sup> Maya Angelou, quoted in Janet Cheatham Bell, *TILL VICTORY IS WON: FAMOUS BLACK QUOTATIONS FROM THE NAACP 1* (2002).

they should be. This exposition deals with a fascinating life of a pioneering medical doctor who delved in a multiplicity of areas within science, teaching, commitment to access to medical care and civil rights, among many others. His contributions are rooted in the seemingly unexpected connections that forge the present to the past in an uncanny way that serves to those who have the privilege of learning about his life. The study of this physician's life also serve to find a fountain of energizing love that stems from learning about the colossal contributions that —against all odds— supplied invaluable medical innovations, as well as how well intentioned, properly planned and tirelessly executed reforms may contribute so much to humanity.

This is a paper about one such exemplary human being: Dr. Louis Tompkins Wright, a medical doctor educated at Harvard Medical School, where African Americans have had the best and worst of time.<sup>6</sup> Moreover, it is a tale that connects to the very beginning of a Harvard Medical School which's very origins spoke of chemical/drugs, biological agents and food, so apt for a course intimately related to the study of Food and Drug Law.<sup>7</sup> Thus, it may be

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<sup>6</sup> See *A Short History of Blacks at Harvard Medical School*, 31 THE JOURNAL OF BLACKS IN HIGHER EDUCATION 122-123 (2001).

<sup>7</sup> "UNIVERSITY AT CAMBRIDGE" – CONTINENTAL JOURNAL (newspaper) – October 30, 1783: Article on the formal ceremonies that installed the three professors that

anticipated how very pertinent his life is to the present course, as it consists in the life of a man who was able to strive against and surmount great obstacles to contribute to the world of biological agents, medical devices, drugs and food safety.

His life, contrasted to others who to the very present take up most of our daily news hours, rather could make us believe that Dr. Wright had read something from the code of self discipline of no less than what the food and drug pioneer, world-renowned predecessor of Fleming's "antibiotics revolution", chemist, bacteriologist, Frenchman Louis Pasteur, eloquently expressed: "Let me tell you the secret that has led me to my goal: my strength lies solely in my tenacity".<sup>8</sup>

How did Louis T. Wright arrive and be admitted to Harvard Medical School? That is a matter that is discussed with more detail below, but it should be noted that the then young Wright had to prove himself much more than most or all his other colleagues.

It had not sufficed that he brought the following references:

"He [Louis Tompkins Wright] seems to be able to take in and digest in one-third the time it does an ordinary student . . . as far as his character is concerned, I would rate it 100%".<sup>9</sup>

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formed what we call today the Harvard Medical School, which took place on October 7, 1783.

<sup>9</sup> Jenkins, *supra* note 3, at 185.

On the other hand, this young man that entered Harvard, what could arguably be described as a shorter, albeit more powerful accolade, from Reverend C.C. Neal, by stating that Wright “led his class in everything”.<sup>10</sup>

Knowingly or not, but following, among other influences, the “secret” of professional success prescribed by one of his most important predecessors in a long line of international contributors to medical research, he proved his hard work would pay off when he was able to –against all odds— obtain admission to Harvard Medical School in 1911.<sup>11</sup>

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<sup>10</sup> *Id.*

<sup>11</sup> Melvin I. Douglass, *Dr. Louis Tompkins Wright: The First Black Police Surgeon of New York*, 17 *AFRO-AMERICANS IN NEW YORK LIFE AND HISTORY* 57 (1993).



**1912 – Club Dinner; the same year Louis Tompkins Wright was to finish his first year at Harvard Medical School.**<sup>12</sup>

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<sup>12</sup> *Harvard Medical School Clubs and Associations Photographs, 1855-1977*; RG M-CL02, Series 00094; Francis A. Countway Library of Medicine; Center for the History of Medicine, Harvard Medical Library and Boston Medical Library Image. Historical Note: Invited speakers at the Aesculapian Club's 10th annual midwinter meeting and annual dinner, held January 20, 1912 at the American House, included Theodore C. Janeway, Professor of Medicine at Columbia University, and David L. Edsall, Professor of Preventive Medicine at Washington University

## II. CHILDHOOD AND FAMILY BACKGROUND

Louis Tompkins Wright, the person “whose research with antibiotics paved the way for FDA approval”<sup>13</sup> of the “miracle antibiotic” aureomycin, was born on July 22<sup>14</sup> or July 23, 1891<sup>15</sup> in La Grange, Georgia.<sup>16</sup> Both of Wright's grandfathers were White.<sup>17</sup> One was prominent man who hailed from the town Wrightsville, Georgia.<sup>18</sup> The other grandparent of Wright was a judge whose last name was Tompkins, the apparent reason behind Louis Wright's second name.<sup>19</sup>

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in St. Louis. Later that year, Dr. Edsall moved to Boston to become Jackson Professor of Clinical Medicine at H.M.S. and Chief of the East Medical Service at Massachusetts General Hospital.

<sup>13</sup> Douglass, *supra* note 11; P. Preston Reynolds, *Dr. Louis T. Wright and the NAACP: Pioneers in Hospital Racial Integration*, 90-6 PUBLIC HEALTH THEN AND NOW 883 (2000).

<sup>14</sup> AFRICANA, THE ENCYCLOPEDIA FOR AFRICAN AND AFRICAN AMERICAN EXPERIENCE 914-915 (1999).

<sup>15</sup> Compare Reynolds, *supra* note 13 (July 22) and *Africana supra* note 14 (July 23)

<sup>16</sup> Henry Louis Gates, *Louis T. Wright, Surgeon and NAACP Chairman*, AFRICAN AMERICANS/VOICES OF TRIUMPH, THE AFRICAN AMERICAN REGISTRY, *available at* [http://www.aaregistry.com/african-american-history/1014/Louis T Wright surgeon and NAACP Chairman](http://www.aaregistry.com/african-american-history/1014/Louis-T-Wright-surgeon-and-NAACP-Chairman).

<sup>17</sup> Reynolds, *supra* note 13, at 1883.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

Wright's biological father, Ceah Kentchen Wright, was born a slave in Southern United States; nevertheless, he would later obtain his legal freedom and would go on to obtain a formal education at Haven Normal School located in Waynesboro, within the state of Georgia.<sup>20</sup> Mr. Ceah Wright enrolled in Clark University in Atlanta, Georgia, after parting ways with his family to engage in his quest to further his educational enrichment.<sup>21</sup>

Not content with having obtained a college education, he opted to expound on his educational foundation by entering Meharry Medical School, one of the only two medical schools open to African Americans in the Southern United States.<sup>22</sup> That college had been founded in 1876 with the project of educating recently-freed slaves, as well as the descendants of these, to become medical doctors. During his time in residence at Meharry Medical School—in Nashville, Tennessee—Ceah wrote a senior-honors thesis that revolved around the deadly smallpox disease—of which the combating pioneer in the U.S. was none other than Benjamin Waterhouse, one of the two original members of the Harvard

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<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> Jenkins, *supra* note 3, at 183 (1996). An interesting sidebar comment is that, according to Jenkins, Dr. Louis Tompkins Wright's sister, Jesse Penn, eventually married Dr. Harold West, who eventually served as Meharry Medical College's president. *Id.* at 184.

Faculty that was to be invested in the inauguration of Harvard Medical School.<sup>23</sup>

Ceah would eventually graduate as the class valedictorian of 1883.<sup>24</sup>

After Louis Tompkins' father spent a term practicing medicine, Mr. Ceah Wright opted to accept a vocation of a full-time religious ministry, in which he served the Methodist Episcopal Church.<sup>25</sup> While he exercised in capacity of he newly invested Minister, he traveled to the town of St. Mary, Georgia, where he met his future wife, the school teacher Lula Tompkins.<sup>26</sup> They would marry shortly, when she was still seventeen and he was a much older thirty-eight year old man.<sup>27</sup>

Wright and Tompkins would eventually procreate two children.<sup>28</sup> Of these, the first child, Carl died of a hemorrhage of the lungs at the age of ten years old.<sup>29</sup>

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<sup>23</sup> *Id.*

<sup>24</sup> Noting another contradiction between sources, it should be said that Douglass, states that Ceah Wright graduated Meharry Medical *College* in 1881 (rather than Meharry Medical *School*, 1883, as asserted by Reynolds. See Douglass, *supra* note 11; Reynolds, *supra* note 13.

<sup>25</sup> Douglass, *supra* note 11; Reynolds, *supra* note 13, at 883.

<sup>26</sup> *Id.*

<sup>27</sup> Reynolds, *supra* note 13, at 883.

<sup>28</sup> *Id.*

<sup>29</sup> Reynolds, *supra* note 13, at 883-884.

His sibling, Louis Tompkins Wright, whose life is the primary object of this article, was born in the year of 1891.<sup>30</sup> A scarce three years after marrying Lula, Ceah Wright passed away of what is suspected to have been an affliction of gastric cancer.<sup>31</sup>

To earn a living, Louis T. Wright's mother taught sewing at Thayer Home, a school for African American girls affiliated to Clark University. As the author P.P. Reynolds eloquently describes:

[...] rather than keep Louis at home, Lula placed him in Miss Hardwick's first-grade class, propelling him into formal education at the age of four. Passing each annual examination, Louis advanced through the grades always younger than his classmates.<sup>32</sup>

When Louis T. Wright was eight years old (four years after his own father's death), Lula, his widowed-mother, remarried.<sup>33</sup> Lula would subsequently contract marriage with Dr. William Fletcher Penn.<sup>34</sup> Penn had entered Leonard Medical School for Blacks in Raleigh, North Carolina, when he was still very young.<sup>35</sup>

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<sup>30</sup> Reynolds, *supra* note 13, at 883.

<sup>31</sup> Reynolds, *supra* note 13, at 884.

<sup>32</sup> *Id.*

<sup>33</sup> Jenkins, *supra* note 3, at 184.

<sup>34</sup> Jenkins, *supra* note 3, at 183.

<sup>35</sup> *Id.*

During his first summer of medical school, Penn traveled to New Haven, Connecticut, where an influential faculty member at Yale encouraged Penn to apply to the medical school.<sup>36</sup> William Fletcher Penn entered Yale in 1893 and graduated in 1897,<sup>37</sup> "taking high rank in all of his classes until the day of graduation."<sup>38</sup> He was the school's first African American student.<sup>39</sup>

Dr. Penn established the Mercy Hospital in Atlanta where he served as chief of the surgical department.<sup>40</sup> Dr. William Fletcher Penn was hailed as a "leading physician in south Atlanta, caring for both White and Black patients, and a distinguished African American surgeon in the South, [conducting] surgical clinics to help his colleagues develop and advance their skills."<sup>41</sup> In 1925, Dr. William

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<sup>36</sup> Reynolds, *supra* note 13, at 884.

<sup>37</sup> As also occurs with a previous discrepancy between Reynolds and Douglass, the former states that William Fletcher Penn graduated from Yale Medical School in 1897 while the latter reports that he graduated in 1898. See Douglass, *supra* note 11; Reynolds, *supra* note 13, at 884.

<sup>38</sup> Reynolds, *supra* note 13, at 884.

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

Fletcher Penn became the chief of surgery at the Veterans Hospital in Tuskegee, Alabama and held the aforementioned position until his death in 1934.<sup>42</sup>

As explained by Reynolds in his relatively exhaustive window into the youth of Louis T. Wright's, heritage –the son and stepson of two highly educated men and a strong and devoted mother remained closely connected to Clark University, his own future *alma mater*— there were to have constituted a remarkable-positive influence in his life.<sup>43</sup>

### III. EDUCATION AND MILITARY SERVICE

Louis Tompkins Wright studied his elementary, secondary and college education at Clark University in Atlanta, Georgia.<sup>44</sup> In 1911,<sup>45</sup> Louis graduated from Clark University as valedictorian, in chemistry.<sup>46</sup>

Louis T. Wright went to Boston, Massachusetts, with the objective of gaining entrance to the prestigious Harvard Medical School.<sup>47</sup> Dean Channing, of the

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<sup>42</sup> *Id.*

<sup>43</sup> Jenkins, *supra* note 3, at 183-184.

<sup>44</sup> Douglass, *supra* note 11.

<sup>45</sup> Louis T. Wright graduated from his bachelor's college degree in 1911 according to Henry Louis Gates and Melvin E. Douglass while, on the other hand, P. Preston Reynolds asserts the graduation date was 1912. See Gates, *supra* note 16; Douglass, *supra* note 11; Reynolds, *supra* note 13.

<sup>46</sup> Reynolds, *supra* note 13, at 884.

Harvard Medical School, sent Wright to see Dr. Otto Folin, professor of biological chemistry.<sup>48</sup> Folin submitted Wright to an exam pertaining to the field of chemistry.<sup>49</sup> Folin called Dean Frothingham and told him Louis “possessed sufficient knowledge of chemistry and should join the entering class in the fall.”<sup>50</sup>

Louis felt a keen admiration for several of his professors, with whom the establishment of mutual respect was prone to develop in the more fertile ground of close proximity, including Dr. Walter Cannon.<sup>51</sup> In due time, Wright would work with Professor Cannon on a project regarding the effects produced by alcohol on the condition of gastric emptying. Eventually, in 1916, his work crystallized into tangible results when he published a paper on that topic at the Boston Medical and Surgical Journal.<sup>52</sup>

However, one should note that Wright suffered from explicit and conspicuous discrimination during his Harvard years. One remarkable example is described in detailed by Reynolds: “When he was called to register for clinical obstetrics, he

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<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> Douglass, *supra* note 11.

<sup>50</sup> Reynolds, *supra* note 13, at 884.

<sup>51</sup> Reynolds, *supra* note 13, at 885.

<sup>52</sup> *Id.*

was told that Black students did not attend to White women at the Boston Lying-In Hospital and that arrangements had been made for him with an African American obstetrician in town. Louis stated firmly that he had paid his tuition, was third in line to name his clinical rotation, and would complete his obstetrics rotation at the Boston Lying-In Hospital with his classmates. Near the close of the obstetrics rotation, Dr. Charles Green stopped Louis and said, "You know it's an amazing thing, you have had about 150 deliveries and there hasn't been a single complaint reach the hospital because of your color."<sup>53</sup> He adds: "The residents so appreciated Louis' hard work and skill that they asked him to stay through the summer months." However, Louis rejected the offer. Regarding this incident, author Melvin E. Douglass asserts "[Wright] got what he was entitled to and the practice of having Negro students deliver babies with a Negro physician, separate from the rest of the class, was abolished."<sup>54</sup>

Louis T. Wright's activism during his student years was remarkable. When Louis was in his third year at Harvard Medical School, he decided to join the National Association for the Advancement of Color People ("N.A.A.C.P.") picket lines protesting the film "Birth of a Nation", a story about Reconstruction that

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<sup>53</sup> *Id.*

<sup>54</sup> Douglass, *supra* note 11.

glorified the Ku Klux Klan.<sup>55</sup> “He felt that no one was free to vilify others and that irresponsible speech that stirred violence against the Negro or any other human was not be tolerated.”<sup>56</sup> After several weeks of demonstrations and negotiations, the group propelled legislation to create a board that would review films to prevent the exhibition of movies like *Birth of a Nation*.<sup>57</sup>

Louis Tompkins Wright graduated from Harvard Medical School in the Class of 1915.<sup>58</sup> Louis had won the Hayden academic scholarship each year.<sup>59</sup> “Despite his being ranked fourth in his class, a “White Jewish student” from Memphis, Tennessee, had blackballed Wright's nomination to Alpha Omega Alpha that was handed down by the dean.”<sup>60</sup> To add humiliation to the unjust forces that prevailed over the persons in Harvard Medical School that did not favor exclusion or marginalization on the basis of race, Wright “was not permitted

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<sup>55</sup> Reynolds, *supra* note 13, at 885; Gates, *supra* note 16.

<sup>56</sup> Eugene P. Link, *The Civil Rights Activities of Three Negro Physicians*, 52 THE JOURNAL OF NEGRO HISTORY 180, 182 (1967).

<sup>57</sup> See *Race in Early American Films*, available at <http://xroads.virginia.edu/~UG99/graham/race.html>. See also, Reynolds, *supra* note 13, at 885.

<sup>58</sup> Link, *supra* note 55, at 180.

<sup>59</sup> Reynolds, *supra* note 13, at 885.

<sup>60</sup> *Id.*

to march in the procession according to his rank".<sup>61</sup> Feeling hurt and humiliated by such an unfair act, seriously thought of not participating in the Commencement activities if they were going to be held under such discriminatory circumstances, but chose to participate out of consideration to the fact that his parents were present to watch their son and step-son graduate.<sup>62</sup>

From his family, came warm expressions of congratulations:<sup>63</sup>

Congratulations my son. Your mother and all of us rejoice in the successful confirmation of ambition ... proud to have such nice things said about you by all the people we have met.<sup>64</sup>

One of the joys that come to all of us this week is the fact that you graduate from Harvard, one of the greatest schools in the world, with such high honors... We all send congratulations by bushels.<sup>65</sup>

Although Louis had an impressive academic record, after graduating fourth at the 1915 Class of Harvard Medical School, he was rejected from the residency programs of Harvard's Peter B. Brigham and the Boston City Hospital.<sup>66</sup> What

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<sup>61</sup> Douglass, *supra* note 11.

<sup>62</sup> *Id.*

<sup>63</sup> Louis' father, portion of message sent by telegram after attending graduation. Jenkins, *supra* note 3, at 188.

<sup>64</sup> Louis' father, portion of message sent by telegram after attending graduation. Jenkins, *supra* note 3, at 188.

<sup>65</sup> Uncle Garland, cited by Jenkins, *supra* note 3, at 188.

<sup>66</sup> Jenkins, *supra* note 3, at 187.

occurred to Wright was difficult to explain were it not due to racial discrimination, as may be evaluated in light of the position to that effect expressed by prominent African-American scholar and former Harvard University Professor, Henry Louis Gates, as well as Eugene P. Link. Wright also was rejected on account of racial discrimination from the Surgery Program in Vancouver, Canada. In fact, “Dr Charles Alan Porter, his surgery professor at Harvard, admitted that he had given Louis more opportunity as a medical student to develop his surgical skills, because he was certain Louis would not be able to secure further training after finishing at Harvard.”<sup>67</sup>

Wright has invited to fill an open position at the Freedmen's Hospital in the District of Columbia, after his stepfather “wrote to the governor of the state of Maryland and other consequential citizens in his efforts to help his stepson receive the opportunity that was denied him on account of his race.”<sup>68</sup> It is worth noting that “Freedmen's Hospital was one of a handful of hospitals where African Americans could obtain postgraduate training, which in 1915 was limited to a 1-year rotating internship.”<sup>69</sup>

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<sup>67</sup> See Reynolds, *supra* note 13, at 885.

<sup>68</sup> Reynolds, *supra* note 13, at 886.

<sup>69</sup> Reynolds, *supra* note 13, at 885.

After his internship at Freedmen's Hospital, Wright returned to Atlanta, Georgia, where he was active in the practice of medicine together with his stepfather.<sup>70</sup> There, he formally joined the NAACP.<sup>71</sup> Wright would be practicing medicine there in Atlanta for approximately one year.<sup>72</sup> In addition, "he scored the highest marks in the state medical licensing examinations in Georgia and Maryland and scored in the top decile (93.4%) in New York State."<sup>73</sup>

Thereafter, in June of 1917, he accepted a commission, investing him with the rank of First Lieutenant in the U.S. Armed Forces, within the Army's Medical Section Officers' Reserve Corps; Louis T. Wright being reported sent to Camp Upton in November of 1917.<sup>74</sup> There is also information that places Wright as assigned to the Medical Officers' Training Camp at Fort Des Moines, Iowa, prior to passing on to Upton, New York (on his way to France, where he would sustain combat induced German-gassing <COCl<sub>2</sub>> that would affect and/or partially impair his lungs and ultimately was the probable long-term cause of his death

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<sup>70</sup> Gates, *supra* note 16; Douglas, *supra* note 3.

<sup>71</sup> Gates, *supra* note 16.

<sup>72</sup> Douglass, *supra* note 11.

<sup>73</sup> Reynolds, *supra* note 13, at 886.

<sup>74</sup> See *Doctors Commissioned at Fort Des Moines Seventy-Five Commissioned First Lieutenants 43 Go to Camp Funston*, THE SAVANNAH TRIBUNE, GEORGIA, p.1 November 17, 1917. Also, see Jenkins 190-192, 194-195.

almost thirty-five years later).<sup>75</sup> Towards the final days of the War, Wright received a Purple Heart and was promoted to the rank of Captain within the U.S. Army, after he was wounded at *Mount Henri*, France.<sup>76</sup>

#### IV. NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF COLORED PEOPLE (NAACP)

Dr. Louis T. Wright was a pioneer civil-rights activist who held important positions in the NAACP.<sup>77</sup> At age 25, Wright, a recent graduate of Harvard Medical School, found with his stepfather and others, Atlanta's NAACP Chapter. Throughout his career as a civil rights activist, Wright served as treasurer on the executive committee when Walter White, his long time friend, was elected secretary.<sup>78</sup>

In 1931, Wright joined the Board of Directors of the NAACP with the goal of racially integrating the Health Care afforded to persons in the United States. In a few years, Louis would already be serving as "the first African American

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<sup>75</sup> Douglass, *supra* note 11. Also, see Jenkins 190-195.

<sup>76</sup> Jenkins, *supra* note 3, at 193-194; Reynolds, *supra* note 13, at 886.

<sup>77</sup> *An Evolving Chairmanship*, THE NEW YORK TIMES, p. 26, February 19, 1999.

<sup>78</sup> Frederick Newsome, *Book Review: Mr. Harlem Hospital: Dr. Louis Wright by Robert C. Hayden*, 89-2 THE JOURNAL OF AFRICAN AMERICAN HISTORY 192 (2004).

Chairman of the NAACP Board of Directors, a voluntary position he held until his death in 1952.”<sup>79</sup>

In his early years as a chairman of the NAACP chairman of the Board of Directors, Wright focused, among others, on strategies to eliminate lynching, and efforts to improve jobs and education.<sup>80</sup> However, it is generally assessed that his most important contribution was NAACP's fight against discrimination in health care.<sup>81</sup> “The NAACP pledged to undertake an active and sustained fight to make available the facilities of each hospital, medical school, and health agency through direct political action and aroused public opinion, so that identical opportunities in medical services would be furnished to all citizens.”<sup>82</sup>

At the 1937 NAACP annual convention, Wright “declared that segregated institutions often provided second-rate training for African American doctors and second-rate treatment of patients.”<sup>83</sup> He stated this was “not because of any inherent lack [of potential], but because it was the common experience that

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<sup>79</sup> *Id.*

<sup>80</sup> Reynolds, *supra* note 13, at 888.

<sup>81</sup> *Id.*

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*

'equal but separate' institutions are separate, but not equal." <sup>84</sup> P.P. Reynolds described that Wright reported that the NAACP board of directors had agreed on three core principles:

“1. Negro doctors are entitled to, and should, build hospitals for treatment of private patients. These should provide efficient care and should give the doctors the monetary gains to which they are entitled.

2. These hospitals should never be larger than the Negro community can support and staff efficiently. This efficiency must be outstanding, not just usual.

3. Negroes should not build segregated hospitals which are large enough to be used as training areas of Negro doctors. There is a pathologic over-simplification of the problem, when Negro doctors must all be trained in one center. Opportunities become limited, and ideals become narrowed.”<sup>85</sup>

In 1944, Wright created the NAACP National Medical Committee. Some members of the Committee were White prestigious physicians such as Russell L. Cecil of Cornell, Walter Cannon of Harvard, and John P Peters of Yale.<sup>86</sup> “The group endorsed 4 principles: (1) “that the country's health is and can be no better proportionately than that of the most neglected health segment of its population; (2) that public or private medical care must be based on per unit of need at any given time or place; (3) that equality of and justice in public and private medical

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<sup>84</sup> *Id.*

<sup>85</sup> *Id.*

<sup>86</sup> *Id. at 889.*

care should be guaranteed to all people; and (4) that unrestricted participation in policy-making deliberations by responsible organizations or governments relative to health is essential to future progress.”<sup>87</sup>

The NAACP asked the National Medical Committee to conduct several studies describing discriminatory practices in medical education, hospitals, and health services.<sup>88</sup> One of the studies, conducted by, W. Montague Cobb, professor of anatomy at Howard University, and “the NAACP central leadership roles in pioneering the racial integration of health care in the United States.”<sup>89</sup>

The National Medical Committee contributed to developed NAACP policies “that later became core elements of the President's Civil Rights Commission report To Secure These Rights.” The report included “key principles of the NAACP, such as the prohibition against the use of federal funds to finance the operation, construction, or expansion of "separate but equal" institutions, including hospitals. The report called for elimination of discrimination against minorities in medical school admission policies and in postgraduate internship

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<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

<sup>89</sup> *Id.*

and residency training, and the opening of all hospitals to American citizens regardless of race.”<sup>90</sup>

## V. HARLEM HOSPITAL

In 1918, Wright married Ms. Corinne M. Cooke, a resident of New York City, just one month prior to shipping off to France to participate in the combat raging in what we know today as World War I (“The Great War”).<sup>91</sup>

It is worth noting that in New York State, Wright was in the top decile (93.4%) of that state’s medical licensing examination.<sup>92</sup> As previously stated, quite possibly even more noteworthy is the fact that Wright graduated with the highest marks in the state examinations regulating the entrance to the practice of medicine in both the state of Georgia and the state of Maryland.<sup>93</sup>

As explained by Professor Henry Louis Gates, “After the war, [Wright] started a small, general practice in Harlem in 1919 that became affiliated with Harlem Hospital.”<sup>94</sup> Dr. Louis Tompkins Wright became the first African American

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<sup>90</sup> *Id.*

<sup>91</sup> Reynolds, *supra* note 13, at 886.

<sup>92</sup> *Id.*

<sup>93</sup> S. Ward Casscells, Dr. Louis Tompkins Wright, *A Pioneer Surgeon of Excellence and Equity*, available at <http://pbmedcentral.nig.gov>.

<sup>94</sup> Gates, *supra* note 16.

physician to be given a staff position in a municipal hospital in New York City.<sup>95</sup> In fact, he became the first Black surgeon to receive a permanent position at Harlem Hospital.<sup>96</sup>

The superintendent of Harlem Hospital offered Louis an entry-level position working in the women's outpatient clinic.<sup>97</sup> Louis did not receive a warm welcome.<sup>98</sup> In fact, some of his fellows quitted because they objected to having to work in a racially-integrated environment.<sup>99</sup> In addition, as a result of his decision to hire Louis, the superintendent of the hospital was transferred to another hospital.<sup>100</sup>

After, Wright's appointment, more African American physicians were hired to work at Harlem Hospital. Two years later, all of them were appointed as attending physicians on the surgical ward service, after an initial rejection on account of race.<sup>101</sup>

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<sup>95</sup> Reynolds, *supra* note 13, at 887.

<sup>96</sup> Douglass, *supra* note 11.

<sup>97</sup> Reynolds, *supra* note 13, at 887.

<sup>98</sup> *Id.*

<sup>99</sup> *Id.*

<sup>100</sup> *Id.*

In 1928, Wright's position in the hospital's hierarchy rose once again, this time to the rank of assistant visiting surgeon.<sup>102</sup> The following year, because of a very outstanding score in the Civil Service Examination, he became the first African American surgeon hired by the New York City Police Department.<sup>103</sup> Wright also was the first African American to be admitted to the American College of Surgeons since Dr. Daniel Hale Williams, which to the best of my knowledge, makes him the second African American to be admitted into that professional guild.<sup>104</sup>

Other Louis Tompkins Wright's accomplishments during his years at Harlem Hospital are described by author Dr. P. Preston Reynolds as follows: "Wright helped establish a nursing school at Harlem Hospital that admitted qualified African American students. The school opened in 1923 and became increasingly active throughout the upcoming decade. Wright sought to create a residency program in surgery and to open all postgraduate training programs in the hospital

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<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> Reynolds, *supra* note 13, at 887; Link, *supra* note 56, at 180; Douglass, *supra* note 11.

<sup>104</sup> See Douglass, *supra* note 11.

to qualified African American applicants. Wright succeeded with the appointment of three Black interns to the surgical residency in 1926...”<sup>105</sup>

In addition, Louis, “with the intention of building support for an integrationist strategy with other health care providers” was instrumental in founding the Manhattan Medical Society. In 1932, the Society successfully opposed the construction of a separate hospital for Blacks in New York City.<sup>106</sup>

Wright’s efforts and initiatives toward the racial integration of private were very successful in Harlem Hospital. “By 1946, more than 25% of Harlem Hospital’s medical and surgical staff was of African American descent, and all the residency programs were open to qualified applicants regardless of race, color, or national origin.”<sup>107</sup>

In 1938, Louis was afflicted with “a severe case of cavitating pulmonary tuberculosis in his right lung,” which gave way to the comments of the President of the University of Newark that were cited above.<sup>108</sup> In 1943, Wright returned to

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<sup>105</sup> Reynolds, *supra* note 13, at 887.

<sup>106</sup> Douglass, *supra* note 11; Reynolds, *supra* note 13, at 887-888.

<sup>107</sup> Reynolds, *supra* note 13, at 887.

<sup>108</sup> *Id.*

work at Harlem Hospital, “where he was elected Chief of Surgery, a position he would hold until his death in 1952.”<sup>109</sup>

Wright’s contributions included several important discoveries. For example, in the area of medical devices, relating to surgery, Wright designed and saw to the elaboration of a brace for transportation of patients with broken necks, and he also held patent for another medical device, a blade plate for fractures of the knee joint. For the first time in medical history, he described a rare fracture of the neck of the femur, called now the “oblique subcervical fracture of the femur.”<sup>110</sup> In addition, “in the area of infectious disease, Wright introduced intradermal vaccination for smallpox”, “proved the effectiveness of the Schick test for diphtheria in African Americans, became an “expert in the treatment of lymphogranuloma inguinale”, and he “was the first to use aureomycin in a human, demonstrating its use in the treatment of lymphogranuloma inguinale and other infectious conditions.”<sup>111</sup> Wright helped develop new antibiotics and did important cancer research.<sup>112</sup>

Dr. Wright published profusely about very important topics:

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<sup>109</sup> Gates, *supra* note 16.

<sup>110</sup> Reynolds, *supra* note 13, at 890.

<sup>111</sup> *Id.*

<sup>112</sup> Gates, *supra* note 16.

In an address delivered in 1982, Dr. Jane Wright, who had by then joined her father at the Foundation [where he remained in spirit], explained the significance of his work. ‘These pioneering studies,’ she explained, ‘led to 15 significant publications demonstrating important remissions in a variety of cancer in man with the use of chemotherapeutic agents.’ She also pointed in a man with the use of chemotherapeutic agents’ ... the first to demonstrate significant remissions in patients with cancer of the breast with methotrexate, a drug prominent in the treatment of breast cancer today.”<sup>113</sup>

He published near than one hundred peer-reviewed scientific articles during his career.<sup>114</sup> His papers included “several influential works on the treatment of bone fractures.”<sup>115</sup> For example, he wrote an important chapter on the treatment of skull fractures in the influential textbook *Treatment of Fractures*.<sup>116</sup> He published dozens of articles regarding the use of aureomycin (“the golden antibiotic”) in humans to treat treatment lymphogranuloma inguinale and other infectious conditions.<sup>117</sup>

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<sup>113</sup> Jenkins, *supra* note 3, at 215.

<sup>114</sup> Gates, *supra* note 16; Reynolds, *supra* note 13, at 890; Link, *supra* note 56, at 180.

<sup>115</sup> Gates, *supra* note 16.

<sup>116</sup> Reynolds, *supra* note 13, at 890.

<sup>117</sup> *Id.*



*Then Chairman of the organization, Louis T. Wright, addresses the NAACP in (1939)*

It is worth drawing attention that Louis T. Wright, as chairman of the Board of Directors of the N.A.A.C.P., “push for investigations into some discriminatory practices in the medical profession.” For example, in 1935, was published the

text *Opportunities for the Medical Education of Negroes*, sponsored by the N.A.A.C.P.<sup>118</sup>

Within the N.A.A.C.P. he started a National Medical Committee “to expose and oppose any form of racial segregation.”<sup>119</sup> In the National Medical Association Journal, Wright attacked superstitions against African-American Patients.<sup>120</sup> In addition, Wright wrote several articles in *The Crisis*, the magazine of the N.A.A.C.P., where he challenged the prejudices that “Negroes had more syphilis, more tuberculosis or more cancer than Whites.”<sup>121</sup>

## VI. DEATH AND LEGACY

Dr. Wright’s accomplishments in improving the quality of health care among Blacks were recognized by numerous organizations. In 1940, Wright was awarded the NAACP’s Spingarn Medal.<sup>122</sup> In 1948, he received an honorary membership in the Medico-Chirurgical Society of the District of Columbia.<sup>123</sup> In 1950, Wright was given an honorary fellowship in the International College of

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<sup>118</sup> Douglass, *supra* note 11.

<sup>119</sup> Link, *supra* note 56, at 183.

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> Gates, *supra* note 16.

<sup>123</sup> Douglass, *supra* note 11.

Surgeons,<sup>124</sup> and “leading citizens such as Eleanor Roosevelt, Dean George Packer Berry of Harvard Medical School and Ralph Bunche paid tribute to him.”<sup>125</sup> After his death, as a posthumous tribute, he was awarded the American Cancer Society Medal in 1953.<sup>126</sup> He was also named as one of the one-hundred most influential African Americans in New York City by the Schomburg Center for Research in Black Culture.<sup>127</sup>

Louis Tompkins Wright died in 1952.<sup>128</sup>

## VII. THE SCHICK TEST

Ms. Wright showed that the Schick Test could be used to determine susceptibility to tuberculosis in blacks, as well as whites.

The Schick Test is “a serological test for susceptibility to diphtheria by subcutaneous injection of a diluted diphtheria toxin that causes an area of reddening and induration in susceptible individuals”.<sup>129</sup>

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<sup>124</sup> *Id.*

<sup>125</sup> Link, *supra* note 56, at 180.

<sup>126</sup> Reynolds, *supra* note 13, at 890.

<sup>127</sup> *Schomburg names NYC's top 100*, ASSOCIATED PRESS NEWSWIRES, September 14, 1998.

<sup>128</sup> Reynolds, *supra* note 13, at 890; Gates, *supra* note 16.

<sup>129</sup> *Véase* <http://medical.merriam-webster.com/medical/schick>.

The Schick Test was developed in 1913, by a Hungarian born American Pediatrician, Bela Schick (1877-1967).<sup>130</sup> “The Schick test serves as a means of determining susceptibility or immunity to diphtheria in humans.”<sup>131</sup> The test was considered “a safe, reliable method of detection that eliminated the unnecessary use of sera with serious side effects.”<sup>132</sup>

Diphtheria is a highly contagious disease” that “causes a false skin or membrane to form over the mucous membranes and sometimes the skin. Symptoms include fever, yellowish white or grayish membrane, adherent, adenitis (inflammation of lymph nodes), nasal discharge and strong, fetid breath odor.”<sup>133</sup>

When the Shick Test is administered “Diphtheria toxin will cause an inflammatory reaction when very small amounts are injected intracutaneously.<sup>134</sup> “By noting the appearance of a patient's skin in the area of insertion, physicians

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<sup>130</sup> Edward S. Jenkins; *Empirical Findings By a Young Medical Scientist on Two Acute Infectious Diseases That Changed Medical Practice*, 21-2 AFRO - AMERICANS IN NEW YORK LIFE AND HISTORY 87 (1997).

<sup>131</sup> See <http://www.textbookofbacteriology.net/diphtheria.html>.

<sup>132</sup> *Id.*

<sup>133</sup> Jenkins, *supra* nota 130.

<sup>134</sup> *Véase* <http://www.textbookofbacteriology.net/diphtheria.html>.

could ascertain a person's susceptibility, or degree of immunity, to diphtheria.”<sup>135</sup>

“A positive test (inflammatory reaction) indicates susceptibility (nonimmunity). A negative test (no reaction) indicates immunity (antibody neutralizes toxin).”<sup>136</sup>

During his internship at Freedmen’s Hospital, Louis T. Wright stood firm when faced with discrimination and he never abandoned his view of racial equality.<sup>137</sup> He conducted an important research, between December 1915 and throughout January 1916, on the Schick test for the condition of diphtheria.<sup>138</sup>

“Wright was told by the director of the National Vaccine and Antitoxin Institute in Washington, D.C., that the Schick Test could not be used on persons of black skin because the reaction could not be seen as a result of the absent contrast. Dr. Wright grew to absorb himself in interest and fascination to study how to treat his patients’, particularly those who were afflicted with diphtheria, as an outbreak of the disease had broken out.”<sup>139</sup>

Wright chose to administer the standard test for that condition, the “Schick test” to a number of his patients. Upon discovering hat the corresponding

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<sup>135</sup> *Id.*

<sup>136</sup> Jenkins, *supra* nota 130.

<sup>137</sup> *Id.*

<sup>138</sup> *Id.*

<sup>139</sup> Jenkins, *supra* note 3, at 189.

(“positive” result for the test) – a skin reaction that was visible to the naked eye and that the darker the skin, the darker the skin reaction, he knew that he was on to something. It was amazing that a young medical doctor could turn conventional-professional wisdom on its head. Moreover, Wright observed that the rate of immunity to the condition in the Black population was similar to that among Whites, so he decided to act to contravene what until that time had been a part of professional belief that had not been adequately tested, thus excluding African Americans or persons with dark colored skin from reaping the benefits from undergoing this test.<sup>140</sup>

Wright noted in his research report:

“The test was carried out among 168 patients, 32 nurses, and 10 interns, making a total of 210 persons tested. Of the 210 persons, 207 were colored, while the remaining 3 were white. The color of the skin of the persons tested ranged from white to black. Light brown, dark brown, and black skins predominated. The ages were between 20 and 40, most between 25 and 30 years. There were 135 females and 75 males in the group. None received any previous injections of antitoxin.

Among the subjects, 26 or 34.2% of the males and 60 or 44.44 % of the females tested positive. Forty-nine or 65.8 % of the males and 75 or 55.56 % of females tested negative. He found 10 cases of pseudoreactions. Wright self-defined pseudoreactions as cases where (1) the appearance of a circle was not well defined, (2) disappeared within 24-48 hours, (3) had only faint pigmentation, and no scaling. Though his standards were independently conceived, he credited Park, Zingher, and Serota as being the first

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<sup>140</sup> Jenkins, *supra* note 3, at 189-190.

to use them. The Park, Zingher and Serota report, which appeared in the Journal of the American Medical Association, had not been published at the time Wright conducted his investigations and he did not know about them.”<sup>141</sup>

Wright added:

“Over the zone of reaction in every positive case, there was an exaggeration of the normal lines of skin together with a definite and, in some cases, marked roughening of the skin. The exaggerated normal lines resembled the grayish trails or striae seen on the surface of papules in lichen planus, and to which the term ‘lichenification’ could be appropriately applied, just as it is to all other lesions that resemble lichen planus in that respect.”<sup>142</sup>

Other information reported in his publication included:

As regards the pigmentation, I found that the darker the skin, the darker the pigmentation. In white and very fair skins the pigmentation was of a light brown color, while in darker skins, the pigmentation was darker than the color of the person tested.... From a scientific point of view, it is only what one would expect, that is, that a pigmented race should show a greater pigmentative reaction to a pigment-producing stimulus than a non-pigmented race. What about a person with extremely dark pigmentation? Could the change in such an individual be obscured by the heavy concentration of melanin? Wright's response was that (1) such an individual was extremely rare in this country, and (2) even in such a case, "the exaggerations of the normal skin would be very noticeable and indicative of a positive reaction."<sup>143</sup>

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<sup>141</sup> *Id.*

<sup>142</sup> *Id.*

<sup>143</sup> *Id.*

Dr. Wright published an influential paper in the *Journal of Infectious Diseases*, about the results and conclusions he reached based on the data he recollected and analyzed. In so doing, he gained recognition as a clinician-scientist with projection beyond the cities he was working in.”<sup>144</sup> Wright wrote:

It is interesting to note that in the Negro the reaction is clear cut as in the white ... Lichenification [the reaction that marked a “positive” from a “negative” test] occurs in all positive cases regardless of the color of the skin, and promises to be of value in differentiating positive from negative reactions in those rare instances where an increase of pigmentation does not take place for one reason or another.<sup>145</sup>

He challenged the prejudice that blacks were more susceptible to diphtheria than whites. Wright stated that “adult negroes possess about the same degree of immunity as do white adults.”<sup>146</sup>

### VIII. THE DREADED SMALLPOX

For centuries smallpox has caused countless deaths and suffering through the typical symptoms it produces: “an acute, contagious, febrile (fever) disease caused by a viral infection.”<sup>147</sup> In the 18th century an English doctor, William E. Jenner, developed a method of vaccination against smallpox.<sup>148</sup>

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<sup>144</sup> *Id.*

<sup>145</sup> Jenkins, *supra* note 3, at 190.

<sup>146</sup> *Id.*

“Modern vaccination consists of a standardized solution of attenuated (live but weakened) smallpox viruses.”

During the period of the War, Wright had one of the most impressive breakthroughs in his career, particularly when one considers how young of a researcher and practitioner he was at the time. During the War, the upper echelons of command were worried that if an outbreak of smallpox would occur, the U.S. forces would be severely weakened. The problem that Wright’s groundbreaking innovation resolved was the following. A segment of the population (including soldiers), is prone not to be inoculated with the method that was being used during the First World War. Thus, the “scratch test” constituted a problem in terms of efficiency, cost, but more importantly, potential unprotected soldiers that could be severely affected if victimized by that condition. Wright, following in the tradition of Benjamin Waterhouse (whose historic house is on the North side of the street facing Cambridge Commons) developed the first “intra-dermal” application of the vaccines.<sup>149</sup>

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<sup>147</sup> *Id.*

<sup>148</sup> *Id.*

<sup>149</sup> UNIVERSITY AT CAMBRIDGE” – CONTINENTAL JOURNAL (newspaper) – October 30, 1783: Article on the formal ceremonies that installed the three professors of law that formed what we call today the Harvard Medical School, which took place on October 7, 1783.

Wright believed what he considered was the most efficient method: “intracutaneous injection of vaccine virus might prove to be a more satisfactory method of virus transference than the one we were using...”.<sup>150</sup> The method developed by Wright was “less painful, and the bleeding virtually eliminated. Without the need for abrasion, skin injuries occurred”.<sup>151</sup>

As explained by Jenkins, “Wright’s intradermal method soon became standard army proceeding findings in the *Intradermal Vaccination Against Smallpox*. The new method pioneered by Wright and used to this day was rapidly able to vaccinate two-hundred and twenty seven (227) volunteers –using the intradermal procedure—in the time it took to inoculate nineteen (19) under the previous method.”<sup>152</sup>

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<sup>150</sup> *Id.*

<sup>151</sup> *Id.*

<sup>152</sup> Jenkins, *supra* note 3, at 192.



***“In 1800, Benjamin Waterhouse (pictured here in an 1831 oil painting by James Frothingham) became the first to test the smallpox vaccine in the United States. He carried out the test on his own family, while serving as one of the first three professors on the faculty of the Harvard Medical School. Photo courtesy of the Harvard Portrait Collection.”*** <sup>153</sup>

#### **IX. PIONEER OF THE USE OF AUREOMYCIN**

“...used on human patients at New York's Harlem Hospital by Dr. Louis T. Wright, the ‘gold dust’ [aureomycin] worked wonders for victims of lymphogranuloma. Like Chloromycetin, it deals with many of the rickettsias. In treating brucellosis (undulant fever), aureomycin is likely to replace the streptomycin-sulfadiazine combination much used at present.” <sup>154</sup>

Due to the power of conveying the magnitude of Dr. Wright's achievements, despite all the odds or obstacles that could have overwhelmed many others, cited are what I transcribe below as integral citations of news

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<sup>153</sup> Alvin Powell, *The Beginning of the End of Smallpox. Medical School Professor Benjamin Waterhouse First to Test Vaccine in the U.S.*, HARVARD UNIVERSITY GAZETTE, May 20, 1999.

<sup>154</sup> TIME MAGAZINE, Nov. 7, 1949.

reports here that are possibly the best way to convey what came out while Wright's successful career was marching forward.

**A) POWERFUL, LIFE-SAVING WORK: PIONEERING MEDICAL RESEARCH AS SEEN THROUGH NEWSPAPERS ARTICLES OF THE EPOCH**

**1. "New Potent Antibiotic" ... "Success Story" ... "The Healing Soil"<sup>155</sup>**

Under these suggestive titles, the first from *The Science News Letter* and the second from *TIME Magazine*, the news trickled out to the public of another of Dr. Wright's successful life-saving contributions to health and combating disease, particularly in the case of aureomycin, which had the fascinating particularity that it not only combated bacteriological-driven diseases, but it also helped to fight virally-caused diseases.

*The Science News Letter* expressed it very vividly:

"A Golden-Yellow drug, cousin to streptomycin but promising to conquer diseases which streptomycin and penicillin do not touch, was announced at the New York Academy of Sciences.

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<sup>155</sup> THE SCIENCE NEWS-LETTER, Vol. 54, No. 5., Jul. 31, 1948, p. 69. (Emphasis supplied)

The drug is called aureomycin, the "aureo" part of its name coming from the Latin for gold, and the "mycin" showing that it comes from a kind of fungus, like streptomycin.

Aureomycin was discovered by Dr. B. M. Duggar of the Lederle Laboratories division of the American Cyanamid Company. These are the same laboratories that produced the new sulfa drug now being tried in cases of infantile paralysis.

The golden-yellow fungus drug is effective against germs of the staphylococcus family, such as cause eye infections, against some viruses and some germs called rickettsia. Q fever, Rocky Mountain spotted fever and both typhus and scrub typhus are among the diseases caused by rickettsias.

Trials of aureomycin on patients have been made in Boston, Minneapolis, at Columbia University, at Johns Hopkins in Baltimore and Gallinger Municipal Hospital in Washington, D. C.

'Excellent results' in treatment of patients with Rocky Mountain spotted fever have already been obtained with aureomycin, a group of Johns Hopkins medical researchers reported.

The members of the Hopkins group are Drs. Morton S. Bryer, Emanuel B. Schoenbach, Caroline A. Chandler, Eleanor A. Bliss and Perrin H. Long.

This group has also used the new drug to treat patients with urinary tract infections. Again, they report, excellent results were obtained.

"A valuable addition" to other drugs such as penicillin and the sulfas is their summing up of their nine months' experience with it.

Its first public announcement at the New York Academy of Sciences was followed by other enthusiastic reports from the physicians who have been testing it clinically.

Some of the patients treated for eye infections were physicians. These doctor patients had had recurrent conjunctivitis, commonly known as pink-eye, for many years and had come to believe that no drug was any good for these infections. Aureomycin treatment was given to them by Dr. Alson E. Bralev and Dr. Murray Sanders of Columbia University.

'They were emphatically enthusiastic about the drug and thought the cure was even more rapid than with penicillin', the Columbia scientists reported.

Aureomycin was effective in all staphylococcus eye infections, provided it was used over a period of several days, and produced excellent results in influenza conjunctivitis.

All of a group of 25 patients suffering from another disease, lymphogranuloma venereum, were helped in varying degrees by the drug,

Drs. Louis T. Wright, Myra A. Logan, Aaron Prigot and Lyndon M. Hill reported. These patients were treated at Harlem Hospital.

In eight cases of buboes, one form of this usually stubborn disease, all patients showed reduction in the size of the gland after four days of treatment.

'This was an event which in our experience over 24 years with several hundred cases of early lymphogranuloma has never occurred spontaneously in so short a time,' the physicians declared.

They believe that the 25 cases represent infections with multiple strains of the virus causing the disease. The activity of aureomycin, therefore, may not be limited to a single strain.

Much of this work is still in the preliminary stage. But trials in Q fever, mixed bacterial eye infection and a virus-caused venereal disease called lymphogranuloma venereum have reached the stage where the drug may soon be released generally used in such ailments.

Aureomycin and the anti-polio sulfa drug are two of the latest weapons that have been made available to doctors in the past decade. They promise to join the other sulfa drugs, penicillin, streptomycin, polymyxin, and chloromycetin in combatting infections.

Aureomycin should not be confused with the new anti-polio drug, Darvisul. It is not an antibiotic but a modified sulfa drug."

## 2. Effectiveness of New Antibiotic, Aureomycin, Demonstrated Against Virus Diseases<sup>156</sup>

On the other hand, The New York Times reported this new exciting development as follows

“Aureomycin, a new antibiotic of germ-fighter, was presented to the public last week at a conference arranged by the New York Academy of Sciences. It is not often that a new medical discovery is trumpeted to the world as this one was. About twenty clinicians were on hand, to testify to the remarkable results so far obtained with it, and so were a dozen chemists of the Lederle Laboratories where aureomycin was isolated by Dr. B. M. Duggar.

Aureomycin is so called because of its golden color. It is extracted of a new species of the Actinomycetes (fungi), which constitute what Dr. Duggar calls “ultramolds”. The particular mold of fungus from which aureomycin comes belongs to a species of the genus Streptomyces, a name which implies a connection with streptomycin. Dr. Duggar suggested at the conference that the species be called *Streptomyces auerofaciens*.

All told, more than eighty antibiotics have been discovered. Half of these come from molds or threadlike fungi and half from the bacteria. The

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<sup>156</sup> NEW YORK TIMES, Jul 25, 1948, p. E9 (1 pp.) (Emphasis supplied)

Actinomycetes constitute a third group, one which Dr. Druggar said has been treated "with static contempt." It was to this largely neglected group that he turned his attention. The result is aureomycin.

### **Usefulness Limited**

Every antibiotic has its limitations, and aureomycin is no exception. Penicillin is still the favorite of physicians because of the many infections which it can overcome and because usually it has not bad side effects. Streptomycin is a close second. But neither penicillin nor streptomycin has any effect on viruses. It is here that aureomycin shines, for which reason it is unique among antibiotics that can be injected or taken by mouth.

Dr. S. C. Wong and H. R. Cox of the Lederle Laboratories injected massive doses of the virus of spotted fever, typhus and "Q" fever in guinea pigs and followed this with aureomycin before symptoms appeared. Not only the guinea pigs fail to develop fevers but antibodies were developed, which means that immunity was conferred against reinfection. Small doses of virus followed by aureomycin may or may not confer immunity.

It does not matter much if aureomycin is injected or given by mouth. The benefits are unquestionable in lymphogranuloma venereum, a rare venereal disease; psittacosis (a disease that human beings can catch from parrots, pigeons and other birds), typhus and rickettsial pox. Spotted fever and typhus

belong to the 'rickettsiae', so named after Dr. H. T. Ricketts, who studied them intensively.

But aureomycin is ineffective against such virus diseases as influenza B, canine distemper, rabies, Newcastle disease (an infection to which fowls are subject), Venezuelan equine encephalo-myelitis (a disease which strikes both the brain and spinal cord) and the one strain of poliomyelitis (MEF-1) on which it has been tried.

#### Eye Infections Treated

Dr. Alson E. Braley and Murray Sanders of Columbia gave aureomycin locally and intramuscularly to 200 patients who suffered from external infections of the eye. Apparently the new antibiotic will clear up all of them more effectively than penicillin and the sulfa drugs.

Aureomycin was tested in the Harlem Hospital in thirty-five cases of lymphogranuloma venereum. "The results were excellent," Drs. L. T. Wright, Murray Sanders, M.A. Logan, A. Prigot and L.M. Hill reported. Fourteen out of twenty-five original cases were followed for periods varying from two to sixteen weeks after discharge. There were no relapses. Aureomycin also works well in another uncommon venereal disease, granuloma inguinale, but more clinical tests are needed here before Dr. Wright and his associates will commit themselves on its efficacy.

Test-tube experiments carried out by Dr. Duggar indicate that aureomycin is more effective against the tuberculosis bacillus than streptomycin. There is no doubt that this clue will be followed up. A controversy is still raging on the virtue of streptomycin in tuberculosis. It may turn out, as it has so often before, that the test-tube success of aureomycin cannot be duplicated in the human body.”

### **3. Chemical Attacks Stubborn Diseases: Venereal Malady and External Eye Ills Are Said to Yield to Aureomycin<sup>157</sup>**

Another article from *The New York Times*, expanded on the previous July article, now reporting in December, the following:

“The new golden-yellow chemical named aureomycin, extracted from a soil mold, has been used successfully by physicians at Columbia University, Harlem Hospital, the Johns Hopkins University School of Medicine and other leading institutions to treat serious infections in human beings that do not respond to either penicillin or streptomycin.

Reports from the institutions were presented yesterday at a conference of the section of biology of the New York Academy of Sciences at the American Museum of Natural History.

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<sup>157</sup> NEW YORK TIMES, Jul 22, 1948, p. 46 (1 pp.)

Aureomycin, the latest member of the family of antibiotics (antibacterial agents elaborated by living organisms), is derived from newly identified species of mold. It was developed at the Lederle Laboratories division of the American Cyanamid Company in Pearl River, N.Y.

The new species of mold was described by its discoverer, Dr. Benjamin M. Duggar, Lederle mycologist. He said it was a member of the genus streptomyces, a relative of the soil mold producing streptomycin. Dr. Duggar proposed it be named streptomyces aureofaciens because of its golden coloring.

#### Used Against Viruses

At Columbia University's College of Physicians and Surgeons and at Harlem Hospital aureomycin has been used successfully against two of mankind's most stubborn diseases-lymphogranuloma and external diseases of the eye. The former, a little known venereal disease, is caused by a virus. To date neither penicillin nor streptomycin has been effective against viruses.

Dr. Alson E. Braley and Dr. Murray Sanders of Columbia used aureomycin against eye infections. They reported that it was effective in all staphylococcal infections if used for several days. In influenzal conjunctivitis, they said the new drug "produced excellent results and was much more effective than penicillin or the sulfonamides."

The work at the Harlem Hospital was carried on by Dr. Louis T. Wright, Dr. Myra A. Logan, Dr. Aaron Prigot, Dr. Lyndon M. Hill and Dr. Sanders. Twenty-five victims of lymphogranuloma venereum were helped in varying degrees by the drug, the doctors said.

#### Doctors Tell of the Tests

Dr. S.C. Wong and Dr. H.R. Cox of the Lederle Laboratories told of their tests with aureomycin in embryonated hens'eggs, mice and guinea pigs.

These tests, they reported showed the drug to possess "marked therapeutic activity" against the viruses of psittacosis (parrot fever) and the lymphogranuloma group and the rickettsiae of the spotted fever and Q fever groups.

Aureomycin failed to show any therapeutic activity against canine distemper, rabies, B strain of influenza, Newcastle disease, Venezuelan equine encephalitis and the MEF-1 strain of polio virus.

Dr. Duggar reported that test-tube experiments with aureomycin indicated it to be more effective against the tuberculosis bacillus than streptomycin, also destructive of the organism causing athlete's foot and other agents producing several skin diseases, and effective against the organism producing a plant form of cancer."

#### 4. How to Keep Well: A New Trio of Antibiotics<sup>158</sup>

In the Mid-West, the Chicago Daily Tribune, reported about the particular benefits associated with:

“Since the discovery of penicillin, streptomycin, and tyrothricin, many antibiotics have come into being. Products having no advantage over this trio or those that proved too toxic to be tolerated have been discarded. Three, however, have not been shelved and reports appear from time to time on their efficacy.

One of these substances is bactitracin, which is obtained from bacteria that were isolated from a bone infection at a little girl named Margaret Tracy. Its bacterial origin differs from penicillin and streptomycin which are produced from molds. It attacks organisms in a manner similar to penicillin that it can be used as a substitute in individuals who are allergic to the wonder drug. The compound is worthy of consideration because in the circumstances, two drugs are better than one.

Chlromycentin is the second of the new threesome but more research will needed before it can be classed with the miracle drugs. The preparation is derived from a fungus found in the soil and shows possibilities of being able to combat several organisms against which we have no defense. These

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<sup>158</sup> CHICAGO DAILY TRIBUNE (1872-1963), Dec 30, 1948, p. 10 (1 pp.)

include certain viruses and rickettsial infections like typhus and Rocky mountain spotted fever.

It is the virus that catches the attention of the physician because a potent weapon against such germs may mean that we are entering an era that will wipe out infantile paralysis, encephalitis, rabies, and other viral diseases. Chloromycetin may not be the answer but the chase is getting hotter.

The third antibiotic, aureomycin is the most promising. It is effective not only against certain viruses but organisms that are resistant to other wonder drugs, which increases its range of usefulness. The preparation has passed thru the laboratory and test tube stages and has been used in patients although is not generally available.

It is preliminary report, Louis T. Wright and his colleagues in the Harlem hospital, New York, were encouraged by its effects in 25 cases of lymphogranuloma venereum, one of the less common of venereal diseases, which is due to a virus. The response with eye infections was even more dramatic. Alson E. Braley and Murray Sanders, of the College of Physicians and Surgeons, Columbia University New York, treated 100 individuals with a variety of eye disorders, ranging from simple conjunctivitis to corneal ulcers. In addition, no patient developed an allergy or toxic reaction. Crispin Cooke employed the drug successfully on a case of Rocky mountain spotted fever.

Antibiotics are a gift from heaven. Penicillin is still the best and streptomycin is the runner-up but has the drawback of causing serious symptoms in some instances. Furthermore, many germs become resistant to its influence after the remedy has been administered over a long period of time. Improved formulas may be expected; however, and dihydrostreptomycin is now available, which promises to be less toxic and may be tolerated by those who are allergic to the older drug.”

#### **5. Aureomycin Found Widely Effective: Harlem Hospital Doctors Call New Drug Most Successful in Gastric Infections<sup>159</sup>**

Once more *The New York Times* would publish an article, this time in May of the following year, dramatizing the claims of wide success regarding the test trials —particularly in Gastric infections— that were pioneered by Dr. Wright’s leadership at Harlem Hospital.

“Recent research work on a host of medical problems, ranging from the control of pain to the proper use of newly discovered drugs, was discussed here today as scientific sessions in connection with the annual meeting of the New York State Medical Society began.

Dr. Stewart G. Wolf of the Cornell University Medical College reported that there was an abundance of experimental evidence indicating that disease

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<sup>159</sup> NEW YORK TIMES, May 5, 1949, p. 23 (1 pp.)

victims suffer two concepts of pain. First, he said, is the actual nervous stimulation from the painful bodily area. Often more important than this, however, is the other phase-the patient's emotional reaction to the fear that he will be pained."

Dr. Wolf reported that this two phase concept of pain is probably of primary importance in considering how a patient can become addicted to a pain-relieving" drug.

A report from the Department of Surgery of Harlem Hospital in New York City, presented by Drs. Selig Strax and Louis T. Wright, declared that the new antibiotic known as "aureomycin" has proved to be highly effective against a wide variety of disease germs during recent clinical experiences.

The report on a year-long study of aureomycin at the hospital said that the new drug has been most effective in the treatment of serious infections of the gastro-intestinal tract and the urinary system.

So valuable is the aureomycin, the doctors said, that it is now used in place of penicillin and the sulfa drugs in some infections and is prescribed in preference to streptomycin in most bacterial infections except tuberculosis.

With aureomycin, in contrast to penicillin, there is "no significant tendency to the development of bacterial resistance, even after months of treatment," the doctors reported.

Aeromycin can be administered orally or by injection, the doctors added, and appears to be effective against a wide variety of organisms that are not affected by penicillin or streptomycin.”

## **B) FURTHER USES OF AUREMYIN: FOOD SAFETY AND PRESERVATION**

Fitting into another of course’s main themes, it is worth noting that Aureomycin was used extensively to preserve food.

### **1. Antibiotic on Human Food<sup>160</sup>**

“Using antibiotics to preserve foods changed from a laboratory promise into commercial reality when the U. S. Food and Drug Administration granted permission for use of Aureomycin as a preservative for uncooked poultry.

Aureomycin, or chlortetracycline, can be used when no more than seven parts per million of the antibiotic remain on treated uncooked poultry. The FDA's decision to allow this amount of residue was based on evidence that cooking poultry destroys this concentration of the antibiotic, so that none is left when the meat is served.

In using chlortetracycline on poultry, the antibiotic is added to the water in which the meat is chilled after dressing. This antibiotic dip hinders the development of spoilage organisms and so prolongs freshness.

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<sup>160</sup> THE SCIENCE NEWS-LETTER, Vol. 68, No. 24, Dec. 10, 1955, p. 373.

The chemical, produced by the American Cyanamid Company, will be sold under the trade name Acronize chlortetracycline.

Application for permission to use the antibiotics was made to the FDA two years ago, and was granted only after many checks and rechecks, Dr. Henry Welch, director of the FDA's division of antibiotics, told SCIENCE SERVICE.

Reason for such stringent precautions in using antibiotics on human food is the danger of allergic reactions in many people, Dr. Welch said.

To have a pesticide, including antibiotics, approved for use in or on raw agricultural products, manufacturers must submit scientific data as to safe tolerance levels for specific products and under different conditions.

American Cyanamid at this time asked only for approval on poultry meats, reporting research on this product alone, Dr. Welch said. Thus, chlortetracycline can now be used only on poultry.

This company and other chemical manufacturers are now determining safe antibiotic tolerances on other meats and fish products, Dr. Welch said, and can be expected to apply for FDA approval for them in the future.”

### **C) EVENTUAL REMOVAL OF AUREOMYCIN USED AGAINST COLDS**

#### **1. Antibiotics Barred for Colds<sup>161</sup>**

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<sup>161</sup> THE SCIENCE NEWS-LETTER, Vol. 84, No. 9., Aug. 31, 1963, p. 130.

“It is easier to cure pneumonia than the common cold. Penicillin, Aureomycin, Terramycin, chloramphenicol and streptomycin are among the antibiotics used in treating pneumococcal pneumonia. However, antibiotics in prescription drugs for the common cold with its multitude of virus types are usually useless and are about to be taken off the drugstore market by Federal Drug Administration action.

FDA's action (Aug. 17) followed a previous move in which drug manufacturers were told to prove that nonprescription antibiotics in such remedies as lozenges, nose drops, mouth washes, deodorants and skin lotions are effective. If the proof is not forthcoming, these easy-to-buy drugstore remedies must be off the market by Sept. 6. Up to 200 companies are involved.

The products affected by the new ruling are taken into the body, not applied locally.

For some time, medical authorities have feared that doctors are giving antibiotics too often for lesser ailments, thus building up a tolerance to the antibiotics that makes them useless when they are really needed.

What chance is there for a common cold cure or vaccine?

The 50 to 100 different viruses that cause the common cold are still as elusive as ever, Dr. Robert M. Chanock of the Laboratory of Infectious

Diseases, National Institutes of Health, Bethesda, Md., told SCIENCE SERVICE.

"We are working toward a vaccine or vaccines that will eventually be effective," Dr. Chanock said, "but so far there is no cure or prevention."

Dr. Maurice R. Hilleman, virologist of Merck Sharp & Dohme Company, said that he had hopes of a vaccine eventually that would be effective against specific viruses.

Dr. Chanock with a group of scientists of the National Institutes of Health, and Dr. Henry Bloom of the Naval Medical Research Laboratory, Camp LeJeune, N. C., recently reported that Coxsackie A-21, a virus usually found in man's intestines, was discovered in the throats of U. S. Marine Corps cold sufferers at that camp. A vaccine could conceivably be made that would be effective against this one virus, but not against the numerous others.

Until it is proved that this virus is a substantial contributor to the occurrence of common colds, a general vaccine would be almost useless, however.

Dr. Hilleman and his co-workers at Merck, along with University of Pennsylvania School of Medicine researchers, reported a study of more

than 200 industrial workers at Rahway, N. J., in which the cold virus coryzavirus was found in 14% of 141 volunteers suffering from colds.

These scientists believe that with the identification of coryzaviruses, along with rhinoviruses and the Eaton agent, the most important causes of respiratory illnesses among adults have been found, which is a step forward in finding treatment.

"Right now," Dr. Hilleman said, "you can take your choice of treatment for two weeks, or no treatment for 14 days and your cold will be over about the same time."

The FDA, acting on recommendations of an advisory panel of medical experts, has changed its regulations on drugs for colds.

The story behind the new regulations: The antibiotic regulations were amended by FDA in 1952 to permit optional use of analgesics, antihistamines and caffeine as ingredients of penicillin tablets for relief of common cold symptoms and the prevention of complications of the common cold and other acute respiratory infection.

Later these same ingredients were permitted for use in other oral dosage forms of penicillin and in certain oral dosage forms of the drug chlortetracycline and its derivatives.

Since then, the experts have raised questions about the efficacy of such drugs for these purposes.

The symptomatic relief that may be provided by the other ingredients of preparations containing both antibiotics and analgesics, or pain killers, antihistaminics and possibly decongestants, would be no justification for any such product to contain an antibiotic, the FDA statement says.

The following advisory panel met with representatives of FDA's Bureau of Medicine and Division of Antibiotics before making its recommendations:

Dr. Harry Dowling, University of Illinois School of Medicine, chairman; Drs. Maxwell Finland, Harvard University School of Medicine; Paul Beeson, Yale University School of Medicine; Carl Schmidt, University of Pennsylvania School of Medicine; and William Jordan, University of Virginia School of Medicine.”

#### **D) FINAL STAGE AND STATUS QUO**

Antibiotic agents, or reasonable facsimiles, generally have a limited shelf life to a great degree because they are prone to cause bacteriological resistance.

##### **1. FDA Publishes a List<sup>162</sup>**

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<sup>162</sup> SCIENCE NEWS, Vol. 98, No. 23, Dec. 5, 1970, p. 431.

“Four years ago the Food and Drug Administration asked the National Academy of Sciences to evaluate the effectiveness of all drugs marketed between 1938 and 1962—a total of about 3,000 products (SN: 10/17, p. 316).

The NAS study was initiated under a law passed by Congress in 1962 which requires that drugs be not only safe but effective.

The FDA is presently reviewing the findings of the NAS study group, and this week it released a list of 359 drug products that it has found to be either ineffective or to have "an unfavorable benefit-to-risk ratio." This list, according to FDA spokesmen, represents 80 to 90 percent of all the drugs that will ultimately be declared ineffective.

The list includes both prescription and over-the-counter drugs. In the latter group are a number of toothpastes, mouthwashes, nose drops and throat lozenges, including such well-known brands as Colgate Dental Cream with Gardol and Pepsodent and Micrin oral antiseptics. In most of these cases, the FDA has decided that there is insufficient evidence that the product reduces tooth decay or has other therapeutic properties.

Among the prescription drugs are Mycillin Suspension, some Aureomycin products, Signemycin Capsules, Neo- Cortef Nasal Spray and

Sulfathiazole Tablets. Also on the list are a variety of fixed combination drugs-notably combinations of penicillin and a sulfa drug.

Though the active ingredients may be quite effective when used individually or in a different ratio, the NAS found that in each instance the particular combination was either ineffective or provided too much of one of the drugs.

The FDA has taken action to have all 359 drugs removed from the market.

Some have already been removed. In other cases, the manufacturers are submitting additional data in an attempt to establish the product's efficacy and persuade the FDA to change its ruling.

Some manufacturers are making changes in the products to render them effective.

The majority of the drugs on the list are prescription drugs, and though some of the listed products are actually hazardous, most are simply ineffective for the purpose for which they are advertised, according to the FDA.

The list has been sent to the Department of Defense, Veterans Administration, Public Health Service and other governmental agencies whose drug purchases might be affected.

The agency hopes to complete its review by next summer.”

## X. CONCLUSION

As we have gone through the journey of this great man that passed away at a relatively young age and surely too soon, it is fair to restate that this is a story worth telling. I hope that I maybe able to play a small part in narrating this and other persons valuable lives.

I find it fitting to end by citing the words provided by a Harvard Medical publication:

The alumni of the Harvard Medical School may now add to their records one of the most significant events in their long history . . . We are given to honoring men for specific achievements in the advance of medicine, but a demonstration of national import expressing an air of spontaneous affection and respect for the person and achievements of a doctor is rare . . . . [Wright’s] achievements in surgery are many, his skill in hospital organization and service exceptional, his social service to the nation great ...

Here shines integrity, high purpose, and persuasive personality.”<sup>163</sup>

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<sup>163</sup> Jenkins, *supra* nota 3.