



Jewish Pediatricians in Nazi Germany: Victims of Persecution*

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The plight and fate of German Jewish pediatricians during the Nazi period in Europe has not received much attention, yet the narratives of the victims still resonate today and they deserve to be remembered. The stories of two women serve as examples of the fateful turns taken by the lives of many German Jewish pediatricians between 1933 and 1945. The two women, Dr. Luci Adelsberger and Dr. Lilli Jahn, illustrate both the ordeals endured and the disparate ways the Nazi policies ultimately spared or ended lives.

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In the decree "zum Schutze des deutschen Blutes und der deutschen Ehre" (for the protection of German Blood and Honor), the Nuremberg Laws of September 1935 declared that German citizens were only those with German blood, or blood of a similar race who were suited to serve the German people and the Reich. Jews were wholly excluded. Denominational membership was not taken into consideration, and many of the victims had been assimilated for generations and were baptized as Christians.

The Nuremberg Laws defined "Jewish" as having three Jewish grandparents. According to current research data, 15% of all physicians in the German Reich in 1933 were considered to be Jewish by Nazi law. Considering the relatively low percentage of Jews in the German population (0.9%), this high quotient of medical specialists acquires an additional dimension when examined in light of their distribution across the spectrum of medical subspecialties. There were 1253 pediatricians practicing within the borders of the Reich. Of these, 611 (47%) were Jewish and therefore subject to the Racial Laws. Almost every second pediatrician was or was considered to be Jewish.

The particular affinity of Jewish German doctors for pediatrics was evident at the advent of the field and ran parallel to its development. One need only recall names like Eduard Hensch, Abraham Jacobi, Heinrich Finkelstein and Bela Schick to serve as examples [1,2]. There is no doubt that German pediatricians and the official representatives of their profession welcomed the seizure of power by the Nazis in 1933. They hoped that it would increase recognition of their field. The regime's political interest in creating racially and genetically pure offspring made pediatrics of particular importance to the state. Representatives of German

pediatricians adopted National Socialist aims. Only a few months after the Nazi seizure of power on 30 January 1933, the German Society of Pediatrics asked their members of Jewish descent to resign voluntarily, or they would be stricken from the membership list. The Society rapidly embraced Nazi racial policy and by 1934 the remaining Society members were already gleefully holding their first fully Aryan National Pediatrics meeting.

In the 1937 issue of the *Reichs Medizinical Kalender*, a directory of doctors, the remaining Jewish doctors in Germany were stigmatized by a colon placed before their names [Figure 1]. Their medical licenses were finally revoked in 1938. They could no

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| Fabian, O Georg 20,  , Reg.R., Mitgl. i. Reichsgesundh.Amt, ~Friedenau, Südwestkorso 3 | : Fehr, Oskar 97, Prof.,  , ~W 62, Keithstr. 10 |
| : Fabian ♀, Gerti, geb. Jacobi 24,  , ~Wilm., Hohenzollern- damm 192 | Fehrensen O., Wilhelm 24, TruppenA d. SS-VT., ~ Baumsch., Baumschulenstr. 92 |
| Fabian, Herbert 35, AssA a. Städt. Kh Neukölln, ~ Buckow-Ost, Rudower Str. 56 | : Feilchenfeld, David 93, SR,  , ~C 25, Prenzlauer Str. 20 |
| : Fabian, Richard 05,  , ~ Wilm., Hohenzollern- damm 192 | : Feilchenfeld, Harry 28, ~N 31, Anklamer Str. 19 |
| Fabricius ♀, Madlene, geb. Frein Speck v. Sternburg 34, AssA a. d. UnvKlin f. natürl. Heilweise, ~Charl. 9, Ma- rienburger Allee 12 | : Feilchenfeld, Hugo 90, SR, ~Schöneb., Hauptstr. 155 |
| Fähndrich, Hans-Albrecht 32, ~SW 29, Bergmannstr. 23 | : Feilchenfeld, Hugo 96,  , ~W 30, Bamberger Str. 15 |
| Fähndrich, Wilhelm 25,  ,  a. St. HildegardKh, ~ Charl. 9, Adolf-Hitler-Platz 5 | : Feilchenfeld, Jakob 94, SR,  , ~C2, Spandauer Str. 17 |
| : Faerber O., Ernst 20,  , ~ Charl. 5, Dresselstr. 3 | : Feilchenfeld, Leopold 84, SR, ~W 62, Burggrafenstr. 17 |
| Fahrenholz O., Kurt 19,  , Anat, aoProf, Dr med et phil, ~Temp., Burgherrenstr. 7 | : Feilchenfeld, Rudolf 20,  , ~Schöneb., Nymphenbur- ger Str. 3 |
| Fahrig O., Carl 08,  , aoProf, Dir d. Pathol. Inst d. Städt. Oskar-Ziethen-Kh, ~Lich- tenb., Hubertusstr. 4 | : Feinberg, Ernst 20,  , ~N 54, Schönhauser Allee 188 |
| : Falk, Albert 11,  , ~Schö- neb., Hauptstr. 30 | : Feinberg ♀, Fränze, geb. Preiß 23, ~N 54, Schönhauser Allee 188 |
| : Falk, Edmund 88, SR, ~NW 87, Siegmundshof 14 | Feindel, René 15,  , ~N 54, Rosenthaler Str. 46 |
| : Falk ♀, Erna, geb. Levi 15, ~Schöneb., Hauptstr. 30 | Feist, Erich 25,  , ~ Lankw., Kaulbachstr. 56 |
| Falkenberg, Friedrich 04, ~O 34, Frankfurter Allee 18 | Feist, Georg 21, ~Friedenau, Hauptstr. 83 |
| : Falkenberg ♀, Hanna 31, ~ Charl. 5, Trendelenburgstr. 16 | Feistkorn, Reinhard 31, AssA a. d.  , Klin d. Charité, ~ NW 7, Schumannstr. 20 |
| Falkenberg, Julius 28, ~Rei- nickend., Residenzstr. 21 | : Feld, Adolf 84, SR, ~W 15, Düsseldorfer Str. 52 |
| | : Feldbrand, Leo 21, ~NW 40, Gerhardtstr. 15 |
| | Feldhoff, Paul 35, AssA a. St. HedwigsKh, ~N 24, Gr. Hamburger Str. 5 |
| | Feldkamp, Aloys 20, ~O 112, Frankfurter Allee 51 |

Figure 1. In the 1937 issue of the *Reichs Medizinical Kalender*, a directory of doctors, the remaining Jewish doctors in Germany were stigmatized by a colon placed before their names.

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longer call themselves "Arzt" or "doctor." They were degraded to the term "Behandler" or, freely translated, "provider." The Jewish doctors had lost their government approbation. They could no longer hang out their shingle and even their prescription pads had to reflect the new law restricting their patients to other Jews [1].

These acts of systematic humiliation forbade the appointment of Jewish doctors. Additionally, they could not own a typewriter, enter theaters or restaurants, use public facilities, or be on the street at certain times. Starting in September 1938, all Jews were forced to bear a second first name, Sara and Israel respectively for women and men. Lest one think such identification measures were only taken by the Nazis, it was actually the Swiss Foreign office that demanded that a big black "J" be stamped into Jewish passports so Jews would be more easily recognized at the German-Swiss borders and promptly turned back.

In 1940, Jewish doctors were excluded from private health insurance; in September 1941 the wearing of the yellow star was enforced; and in October 1941 all emigration was definitively prohibited and mass deportations began. At the Wannsee Conference outside Berlin in January 1942, it was finally resolved that Jewry be eradicated from all German-controlled areas. This conference was "the prelude both to the deportation and assassination of the Jewish population in all territories occupied by or allied with Germany, and to the deliberate, planned killings in the extermination camps of Eastern Europe" (Wannsee Memorial plaque, Wannsee, Berlin).

The fate of those Aryan doctors whose spouses were of Jewish descent was equally influenced, if not to say radically altered, by these conditions. Aryan doctors whose spouses were of Jewish descent were advised to divorce if they wanted to keep their jobs, as happened to Dr. Moro (of the Moro reflex) in Heidelberg. He was fired simply because he did not want to divorce his Jewish wife. The very same thing happened to H. Seckel (of the Seckel syndrome) in Cologne who luckily escaped to Chicago.

After the November pogrom in 1938 known as *Kristallnacht*, emigration and flight reached new heights. A special tax was levied, the so-called *Reichsfluchtsteuer*, or "escape tax," which amounted to 25% of one's total net worth. As a result, many Jews were only able to leave with negligible funds.

By 1941, approximately 750 pediatricians had left Germany and, after annexation, Austria and Prague. The main countries accepting these refugees were Palestine, Great Britain and the United States. New York State accepted more than twice as many refugees as all the other states in the Union combined.

After the annexation of Austria (the

Anschluss) in 1938, the U.S. State Department proposed that an international conference be held in Evian, Switzerland in order to resolve the refugee problem on a broad basis. However, since the isolationist U.S. stubbornly held to its position of maintaining prescribed quotas, all of the other 32 countries present also refused to raise their immigration quotas [3].

For those who remained in Germany or its annexed countries, fate turned grim. Deportations began in October 1940, first in Baden and the Palatinate. The deportees were transported to the south of France. Others were sent to the "model" camp Terezin, created as a ghetto for the elderly, with a direct rail link to Auschwitz Birkenau.

About fifty German pediatricians were deported to the camps in Eastern Europe after 1942. Seven survived, all the others died or were murdered. Because the camps in Eastern Europe were devised and constructed as extermination camps, extermination often occurred on the day of arrival.

The deported pediatricians were formally registered as transport doctors, responsible for taking care of the children in the trains. A few of them accompanied the children into the gas chambers (for example, Dr. Julius Strauss of Mannheim)

The German historian Sebastian Haffner once wrote, "You have to read biographies, but not the biographies of men of state, but rather the rare biographies of unknown people, they are much too rare" [cited in 4]. And so I have chosen to highlight the narratives of two German Jewish pediatricians whose stories are particularly moving [5,6].

Lucie Adelsberger

Lucie Adelsberger was born in Nuremberg in 1895. Her father was a wine merchant. She studied medicine close by in Erlangen and



Figure 2. Lucie Adelsberger. **[A]** In 1920 after she graduated from Medical School in Erlangen, Germany. **[B]** In the 1960s, working in her laboratory in the Department of Pathology, Montefiore Medical Center, Bronx, New York.

graduated in 1919 [Figure 2A]. She chose the field of pediatrics, and interned first at a hospital in Nuremberg and then at a number of hospitals in Berlin. Early on, she was drawn to scientific work on the causes of allergies and hypersensitivity reactions. She was the first to group disparate entities such as eczema, urticaria, hayfever, asthma, and migraine into a symptom complex of hypersensitivity reactions. In 1927 she entered a research group at the famous Robert Koch Institute in Berlin. The Koch Institute was led to international eminence by Paul Ehrlich and August von Wassermann and was then a hub of German medical research. In addition, Dr. Adelsberger maintained a medical practice with special emphasis on allergic diseases in the Berlin workers' district, Wedding. She wrote a monograph on allergic diseases in 1929 that was widely circulated and quoted in the German medical world and published at least 15 papers between 1924 and 1933 in German and French [7-10]. Dr. Adelsberger advocated the installation of public health facilities for evaluation and counseling of patients with rheumatoid diseases and diabetes and was a founding member of the German Women's Medical Society [1].

In March 1933, a mere two months after the Nazi takeover, Dr. Adelsberger and eighteen other scientists from the Robert Koch Institute were summarily dismissed, and she was restricted to her private practice with all the other humiliations described above. In April of that year she was denied participation in the National Health Insurance Plan that, for most physicians, provided the bulk of their incomes.

Later that year, Dr. Adelsberger received an invitation from Harvard to take over a leadership position in the Bacteriology Department of the Medical School. Alas, the Gestapo denied her a visa. In 1938, she finally obtained a 10 day visa for the U.S. and was fortunately at Harvard during the *Kristallnacht* pogrom. By then an edict of President Roosevelt was in effect that allowed persons at risk to remain in the U.S. Lucie, however, returned to Berlin to care for her ailing mother who depended on her and whom she could not abandon to the uncertainties of the times.

In Berlin Dr. Adelsberger continued to work as a "provider." From 1938 onward she could only treat Jewish patients. A unique document from that time has endured: a prescription. The details were published in the *Archives of International Medicine* in 2000 under the title: "A Jewish Physician Amidst the Holocaust." On 20 November 1940 a 20 year old patient named Helen Nathan was treated by Dr. Adelsberger. Ms. Nathan was an athlete, a member of the Jewish Bar Kochba Sports Club in Berlin and a champion in the 100 meter dash. She received a prescription for a barbiturate and a shampoo for external use. Helen Nathan survived and donated the prescription to the Museum of Jewish Heritage in New York City [11] [Figure 3].

Lucie was deported to Auschwitz in 1943. Although the deportations had begun earlier in 1942, she was initially spared because, as a physician, the Jewish Council needed her to take care of ailing members of the Jewish community. Lucy was with the 38th *Osttransport* leaving Berlin on 17 May 1943. In Auschwitz Dr. Adelsberger worked first in the infirmary of the death camp's

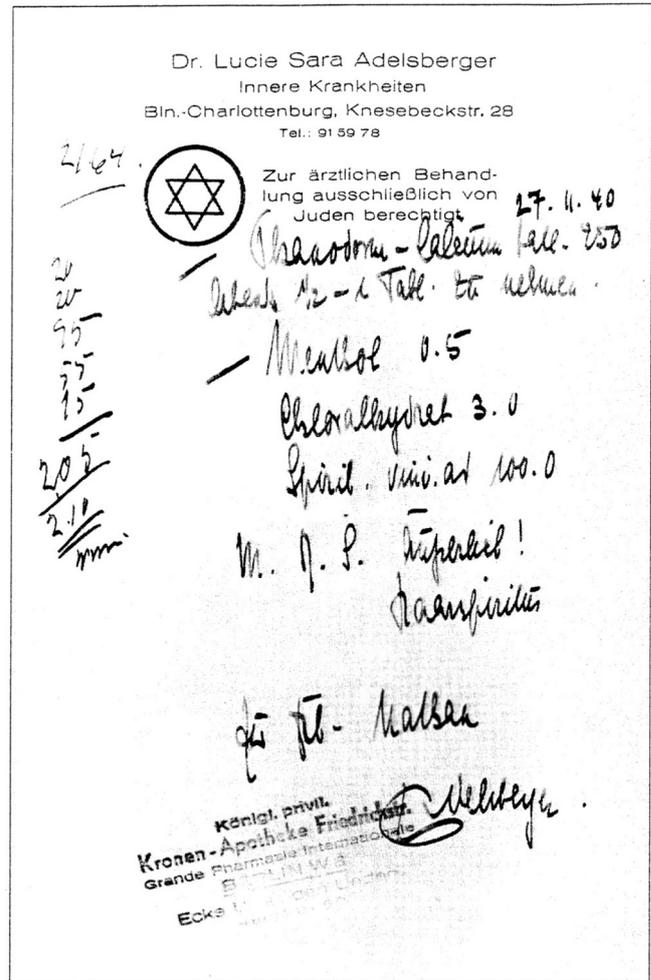


Figure 3. Prescription written by Lucie Adelsberger for Ms. Helen Nathan in Berlin. Dr. Adelsberger is identified as a "provider" who is permitted only to care for Jewish patients. The prescription is for barbiturates and a shampoo for external use.

gypsy section. All the surviving gypsies (20,000) were gassed on 2 August 1944.

She described her experience:

I was sent on 21 May 1943 to the gypsy camp together with two other women physician prisoners because there was a typhus epidemic. Here we were in a small block fifty feet long and thirty feet wide, where nearly one thousand prisoners were packed together. Where everything was swarming with lice, where the hygienic circumstances were catastrophic.

The only thing doctors could do for their patients, emaciated, skeletal or swollen with edema of starvation and wallowing in feverish deliriums, was to comfort them. It didn't make them any better, they still died like flies. And again, and again, rising up between the death rattles of the dying and the drawn-out moans was the gypsy call, "Mulo, Mulo" (a corpse, a corpse). [5]

While at Auschwitz Lucie struggled to help sick inmates survive under the most nightmarish conditions as selections at the camp were ongoing. The mechanism of selection was firmly established and everyone knew its every detail. The camp physi-

cian commandeered one or more blocks and ordered the naked prisoners to pass by in single file. He then chose those who, because of weakness or undernourishment, edema of starvation or because of scabies or sunburn – there were reasons enough – were to go to the gas. The identification numbers were recorded on the spot and they were immediately transferred to the selection block, where they waited for death, often without food and fully aware of their fate.

Following the liquidation of the Gypsy Camp in July 1944, Dr. Adelsberger was assigned to supervise the sick children in the women's camp in Birkenau. Her recollections of the women's camp at Auschwitz provide a rare perspective on the unique experiences of female inmates. The following account illustrates their experience and also demonstrates that Lucie, in order to save lives, was often confronted with disturbing ethical dilemmas. As she reports:

According to SS guidelines, every Jewish child automatically condemned his mother to death. Apart from the individual chance occurrences, the camp did not keep Jewish children. They were consigned to the fire, either living or gassed, and they were not alone, for their mothers went with them.

Pregnant women were frequently admitted to the camp. They included women from mixed marriages, who were generally spared the gas, and childless full Jews whose pregnancy was not detected when they arrived. A number of them were subjected to forced abortions. So it happened that a few actually gave birth in the camp. There they received medical and nursing care, at least as far as was possible in a concentration camp. However, as soon as the newborn saw the light of day, the inconceivable happened. Within a week both were sent to their deaths.

Medical ethics prescribe that if, during labor, the mother and the child are in danger, the priority must be to save the life of the mother. We prisoner physicians acted quietly in accordance with this regulation. Many women never got over the shock of the death of their newborn infant and have forgiven neither themselves nor us. [5]

On 18 January 1945, as Russian troops advanced towards Auschwitz, the Nazi guards began a forced march of 50,000 inmates away from the camp in the snow. Many were killed or died. Dr. Adelsberger survived this march and was eventually transported to Ravensbrueck, where she was liberated on 2 May 1945. She reported her medical observations in 1946 in *The Lancet* [12], and described some of the diseases seen in the camp: typhus, dysentery, typhoid fever, malnutrition, noma (a gangrenous stomatitis) and pellagra. After the war Dr. Adelsberger emigrated and worked as an immunologist at Montefiore Medical Center in the Bronx, New York, and continued to publish [13-20] [Figure 2B]. The President of Montefiore, Dr. Ephraim Bluestone, hired her "because she was from Germany, therefore well trained and she would work for little money." In 1995, Northeastern University Press published her unique memoirs in English: *Auschwitz, a Doctor's Story*. In non-medical terms she described her experience as "hell on earth."

Dr. Adelsberger retired in 1966 and died in 1972 in Florida.

Her obituary in the *New York Times* can be found in the archives of Fordham University. The obituary reports that in 1963–64 she was asked to be a witness in the Frankfurt Auschwitz proceedings. She wrote a letter to the *New York Times*:

The significance of the trial does not lie in the proof or disproof of guilt of the individuals who have caused unspeakable suffering and who can no longer be reached by law. The significance lies more in the fact that German courts are bringing to light official evidence of crimes and atrocities and are making the world aware of them. This gives hope that human rights are again respected by the German courts and by the present German generation.

Lucie Adelsberger MD, Auschwitz Concentration Camp, Prisoner number 45171, New York 17 February 1964 [5]

The epilogue of her book explains:

This report tells the story of the victims. Not with the purpose of opening old wounds, but of passing it on as a legacy for Jews and for all mankind. It will fulfill its purpose only if it helps teach us, who call ourselves the children of God, to become better human beings, to truly love our neighbors and to work toward the eradication of brutality from the face of the earth.

Lili Jahn

The second illustrative narrative belongs to Dr. Lilli Jahn, who lived from 1900 until 1944. Her story was published by her grandson Martin Doerry three years ago in German and last year also in English [6]. Martin Doerry is the editor of the influential German news magazine *Der Spiegel*. The German writer Martin Walser wrote in a review in the *Sueddeutsche Zeitung*, "I only wish the story were invented, for my own sanity I prayed that the story was made up, as I was reading the book. Alas it wasn't, it is brutally true" [4].

Lilli was born in Cologne. She finished her medical studies in 1924 as Lilli Schuechterer and married Ernst Jahn, also a physician, though not Jewish [Figure 4]. In the period from 1927 until 1940 they had five children. They both practiced from their home in Immenhausen, a small town in Germany. Her identity card bore the large black "J" stamp. In 1942 Ernst Jahn divorced Lilli and had a child with another, younger, Aryan physician.

As the wife of a non-Jewish German, Lilli had been protected. That protection was now ruthlessly removed, literally from one day to the next. The only reason she was not deported right away was a regulation that protected mixed marriage partners with children under age 18, at least for a while. Dr. Jahn was forced to relocate to Kassel, and as a provisional sign on the door she affixed one of her business cards, which read, "Dr. med Lilli Jahn."

This simple act had dire consequences. First, it violated the order of 1938 that all Jewish women had to use the middle name Sara, as Dr. Jahn already did in her passport. Secondly, Lilli had forgotten to erase the "MD" from her card. That title was totally forbidden to Jewish citizens, as they were merely "providers." Somebody reported her to the Gestapo, who searched her home and office, but found nothing. The next day she was summoned to appear at headquarters. She never came home and her five



Figure 4. Lilly Schuechterer after she married Ernst Jahn in 1927

children, between the ages of two and fourteen, were left alone. The eldest went twice to the Gestapo over the next two days and inquired about her mother. Finally, she was told that if she came once more she would also be detained.

Dr. Jahn was sent to a labor camp near Kassel, where she managed to send and receive letters from her children. In these heartbreaking documents she asks for a nail file, some shoe polish, maybe some cheese. These letters reveal such longing, such love, such deprivation, and such suffering. Martin Walser feels the book belongs in every German school. Despite pleading and despite the heart-wrenching letters from her girls, Lilli was deported to Auschwitz in March 1944. There is one letter from Auschwitz to her sister. In September 1944 the children received official notification that their mother had died. The fee for that notice was 60 pfennig. To this day her children do not know whether she died from weakness or illness or whether she died in the gas chamber.

Her son Gerhard rose to prominence in the Bonn Republik, where he served as Secretary of Justice under Willy Brandt, upholding the justice his mother was so cruelly deprived of. The biography of Lilly Jahn is another biography of an otherwise unknown person seared into our minds and writ large with the blood from the wounded heart of Lilli.

In Germany, the Jewish pediatrician victims of the Holocaust were remembered in a Public Commemoration at the Annual Conference of the German Pediatric Society in Dresden in 1998, and the *Kaddish* was sung by the Chief Rabbi of Saxony. We owe to those who died, all victims, to ensure that the cry "Never again," so easily coming off our lips, does at least mean what it says. At the 60th anniversary of the liberation of the Dachau Concentration Camp near Munich, one of the graying survivors said to German high school students present at the ceremony: we won't hold you responsible for what happened, but we will hold you responsible that it won't happen again [21].

Acknowledgment. I wish to dedicate this article to Dr. Allen S. Goldman, who was always a guiding inspiration in my work in Pediatric Endocrinology

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References

1. Seidler E. Kinderaerzte 1933-45. Victims of Persecution. Bonn: Bouvier Verlag, 2000. Published in German with partial English translation. For a review of the book, see also Drukker A in *N Engl J Med* 2000;343:1276.
2. Seidler E. Die Schicksale juedischer Kinderaerzte im Nationalsozialismus. Ein Vorbericht. *Monatsschrift fuer Kinderheilkunde* 1998;146:744-53.
3. Picard J. Die Schweiz und die Juden 1933-45. Schweizerischer Antsemitismus, juedische Abwehr und internationale Migrations- und Fluechtlingspolitik. 3rd edn. Zurich: Chronos, 1994.
4. Walser M. Ums Leben schreiben-das Buch der Lilli Jahn und ihrer Kinder in *Sueddeutsche Zeitung*, 8 August 2002, p. 14.
5. Adelsberger L. Auschwitz-ein Tatsachenbericht. Bonn: Bouvier Verlag, 2000. Published also in English: Adelsberger L. Auschwitz: A Doctor's story. Translated by Ray S. Boston: Northeastern University Press, 1995.
6. Doerry M. Mein verwundetes Herz-das Leben der Lilli Jahn 1900-1944. Stuttgart: Deutsche Verlags Anstalt, 2002. Published also in English: My Wounded Heart. The Life of Lilly Jahn 1900-44. Translated by Brownjohn J. London: Bloomsbury Press, 2004.
7. Adelsberger L. Zur Praxis der Allergie-Erkrankungen im Kindesalter. *Kinderaerztliche Praxis* 1932;3:97-119.
8. Adelsberger L. Der Wert des Testens. *Dtsch Med Wochenschr* 1933;59:927-30.
9. Adelsberger L, Munter H. Zur Klinik des Heufiebers. *Med Klin* 1932;28:860-4.
10. Adelsberger L. Anaphylaxie und Atopie. Versuche mit passiver Uebertragung. *Z Hyg Infekt* 1929;110:104-19.
11. Hoenig LJ. A Jewish physician amidst the Holocaust. *Arch Intern Med* 2000;160:2891-4.
12. Adelsberger L. Medical observations in Auschwitz concentration camp. *Lancet* 1946;i:317-19.
13. Adelsberger L. Differences in immunologic reactions of red blood cells of a tumor susceptible (C3H) and a tumor-resistant (C57) mouse strain. *Cancer Res* 1951;11:653-7.
14. Adelsberger L. Differences in the hemolytic behavior of red blood cells of a tumor-susceptible (C3H) and a tumor-resistant (C57) mouse strain. *Cancer Res* 1951;11:658-62.
15. Adelsberger L. Typhus fever in Auschwitz concentration camp. *J Am Med Womens Assoc* 1952;7:102-3.
16. Adelsberger L, Zimmermann HM. In vitro demonstration of an antigen in red blood cells of C3H mice. *Cancer Res* 1953;13:521-4.
17. Adelsberger L, Zimmerman HM. The effect of transplanted tumors on the hemolytic behavior of red blood cells from C3H and C57BL mice. *Cancer Res* 1954;10:725-9.
18. Adelsberger L, Zimmerman HM. A hemolysin in human lung cancer. *Acta Unio Int Contra Cancrum* 1959;15:480-4.
19. Adelsberger L, Zimmerman HM. The effect of tumor suspensions on human red blood cells. *Trans N Y Acad Sci* 1960;23:148-54.
20. Adelsberger L, Becker NH. Effect of cancer supernatants on cancer and normal red blood cells. In vitro and electron microscopic studies. *Lab Invest* 1965;14:40-7.
21. *Sueddeutsche Zeitung*, Munich, 20 May 2005.

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