#### ARTICLE



# Pioneers in pathology and female role models: the Jewish scientists Rahel Rodler, Ruth Silberberg, Lotte Strauss and Zelma Wessely

Hendrik Uhlendahl\*, Stephanie Kaiser, Nico Biermanns and Dominik Groß

Institute for History, Theory and Ethics of Medicine, Medical Faculty, RWTH Aachen University, Wendlingweg 2, 52074 Aachen, Germany

\*Corresponding author. Email: huhlendahl@ukaachen.de

#### Abstract

So far, female physicians have played a minor role in scientific studies of Nazi victims; this also applies to specialists in pathology. Against this background, the present study examines the biographies of the outstanding Jewish pathologists Rahel Rodler (1878–1944), Ruth Silberberg (1906–97), Lotte Strauss (1913–85) and Zelma Wessely (1914–2004). The focus is on their roles as women scientists and their fateful careers after the Nazi rise to power, embedded in the context of the position of women in medical studies and the medical profession of their time as well as in the subject of pathology. The study is primarily based on archival sources from various German, Austrian and Swiss state and university archives, from the British National Archives and from the National Archives and Records Administration in Washington DC. The paper provides three key findings: (1) The four female pathologists were rare exceptions in the contemporary pathological scientific community with a quantitative share of less than 5%. (2) They experienced discrimination on two levels (gender and 'race'). (3) Thanks to professional excellence and continued dedication, three of the four female pathologists were able to escape from Nazi Germany and achieve remarkable careers in emigration. It can be concluded that Rodler, Silberberg, Strauss and Wessely rose to female role models and pioneer scientists in contemporary pathology.

Keywords: Pathology; Women scientists; Gender; National socialism; Persecution; Emigration and immigration

#### Introduction

For a long time, historical research on the medical profession under National Socialism has focused on perpetrators and, moreover, overwhelming on men. Since the beginning of the 2000s, research into disenfranchised, persecuted and displaced medical physicians has also come into focus. For pathologists, recent studies have revealed that this professional group is decidedly comprised of victims, as well. Two cross-sectional studies have identified 118 pathologists, mostly university professors and lecturers, who were persecuted under National Socialism,<sup>1</sup> of whom one hundred portraits have recently been published by Biermanns and Groß in the form of a memorial book.<sup>2</sup> Examining these studies as well as the purely biographical work of Biermanns and Groß, it is notable that women appeared to be remarkably underrepresented among this group, which included just four female individuals. They

<sup>&</sup>lt;sup>1</sup>Janina Sziranyi *et al.*, 'Disfranchisement, Expulsion and Persecution of Pathologists in the Third Reich – A Sociodemographic Study', *Pathology – Research and Practice*, 215, 9 (2019), 152514, https://doi.org/10.1016/j.prp.2019.152514; Hendrik Uhlendahl *et al.*, 'Success or Failure? Pathologists Persecuted Under National Socialism and Their Careers After Emigrating to the United States', *Pathology – Research and Practice*, 218 (2021), 153315, https://doi.org/10.1016/j.prp.2020.153315.

<sup>&</sup>lt;sup>2</sup>Nico Biermanns and Dominik Groß, *Pathologen als Verfolgte des Nationalsozialismus. 100 Portraits* (Stuttgart: Franz Steiner, 2022).

<sup>©</sup> The Author(s), 2023. Published by Cambridge University Press.

accounted for only 3.4% of those identified. At the time, women pathologists were, indeed, a rarity<sup>3</sup> – even compared to the proportion of women in medical professions in general.<sup>4</sup>

The four women in this group were pathologists Rahel Rodler (1878–1944), Ruth Silberberg (1906–97), Lotte Strauss (1913–85) and Zelma Wessely (1914–2004). Based on the aforementioned gender ratio within the field of pathology, they represented an exception in their profession simply because of their gender. Moreover, they were all of Jewish ancestry, which is why they were persecuted by the National Socialist regime. At the same time, their careers were marked by extraordinary professional success in the face of a wide variety of difficult conditions. This study thus focuses on the hitherto insufficiently investigated group of the female victims of National Socialism who had, contrary to the image of women prevalent during their lifetime, made a successful professional career. In contrast to the aforementioned previous works on pathologists persecuted by the Nazis, the purpose of this investigation is not the remembrance of these individuals nor a purely biographical approach to these women. Instead, the racial and especially gender-specific obstacles experienced by these four women over the course of their lives and careers will be examined. This study concludes that Rodler, Silberberg, Strauss and Wessely not only became pioneers in the field of pathology, but also became female role models in the sociohistorical context.

Their biographies – and any cross-references – form the basis of this study. We start by presenting a concise overview of their individual life paths. With this, we connect the historical classification of women in contemporary medical studies and in the medical profession in general as well as with pathology. We place particular focus on gender-based barriers and also shed light on disenfranchisement of these individuals as well as on potential forced migrations by the National Socialist regime. Numerous parallels in the life histories of these four women are particularly noteworthy, as well as comparisons with male pathologists of Jewish ancestry. We are furthermore interested in the extent to which proven acts of discrimination and repression led to career breaks or other significant life events for these individuals. With this background in mind, we investigate the further professional paths as well as the medical research careers of these women *after* the National Socialists assumed power in 1933.

#### Material and methods

The study is primarily based on archival sources from various German, Austrian and Swiss state and university archives, from the British National Archives and from the National Archives and Records Administration in Washington DC, all regarding Rahel Rodler, Ruth Silberberg, Lotte Strauss and Zelma Wessely. In order to reconstruct the individual life and career stages of the four individuals, we worked primarily with matriculation and examination registers, emigration documents, civil status registers and marriage certificates.

We investigate the individuals considered in this study in the German-speaking context of the German Kaiserreich (1871–1918), the Weimar Republic (1918–33) and the Third Reich (1933–45). Additionally, we also consider their trajectories in the United States (Silberberg, Strauss and, later, Wessely) and in Great Britain (initially, Wessely) between 1933 and the late post-war period, as this time span was decisive for the careers of the emigrants.

Incorporating historical gender research, this study takes a decidedly collective biographical contextualising approach. Therefore, the lives of the four female pathologists are treated here in a particularly extensive and detailed manner. This is justified by the importance of their individual career stages for the subsequent contextual classification into the prevailing gender relations of the periods under investigation. This refers both to the gender relations existing in these periods in general and

<sup>&</sup>lt;sup>3</sup>Uhlendahl *et al.*, *op. cit.* (note 1).

<sup>&</sup>lt;sup>4</sup>Hans-Peter Kröner, *Die Emigration deutschsprachiger Mediziner im Nationalsozialismus*, Berichte zur Wissenschaftsgeschichte 12, Sonderheft (Weinheim: VCH, 1989), 11; Uhlendahl *et al.*, *op. cit.* (note 1).

explicitly in the medical professional setting. Without being able to refer to the respective details of the presented biographies, a precise classification in the sociohistorical context – and thus the elaboration of the main argument of this study – would not be possible.

This article aims to make an insightful contribution to historical gender research. It is clear that the professional and gender-related achievements of these four women, who were subject to completely different conditions than their male colleagues, have not yet received recognition in retrospective. Accordingly, the study is also intended as an impetus for future research on the role of women within the medical profession during the Third Reich especially since it is very likely that such pioneering women are also as yet unexposed in other medical fields. Furthermore, this work provides a contribution to research on victims of National Socialism, which, despite some progress, continues to be neglected in contrast to research on perpetrators.

## Rahel Anna Ruth Rodler, née Zipkin (1878–1944) – the first woman in the German Pathological Society

The Russian-German pathologist and laboratory physician Rahel Anna Ruth Zipkin was born on 16 January 1878 in the town of Kojetanoff near Minsk in former Russia (present-day Dsjarschynsk, Belarus). She was the daughter of Mowcha (Moses) Zipkin (1845–1907), an affluent Jewish merchant, and Darja Zipkin, née Neumann.

As women in czarist Russia had virtually no prospect of attending university, and as the German medical faculties were not admitting any women at the time, Zipkin went to Bern, Switzerland, to study medicine like many other daughters born to affluent families.<sup>5</sup> In 1902, she received her doctoral degree with the thesis 'Kenntnis der gröberen und feineren Struktur-Verhältnisse des Dünndarmes von Inuus Rhesus' ('Understanding the Fine and Rough Structural Relationship of the Small Intestine of the Inuus Rhesus')<sup>6</sup> at the Laboratory of the Institute of Anatomy at the University of Bern under professor Hans Strasser (1852–1927) and subsequently passed the state medical exam.<sup>7</sup> Zipkin first remained in Bern and served as an assistant under her instructor and benefactor Theodor Langhans (1839–1915) at the Institute of Pathology until 1906.<sup>8</sup> Zipkin was, at the time, the only female research assistant and one of only two women on the entire faculty of the University of Bern, along with the Russian Jewish private lecturer Anna Tumarkin (1875–1951) from the area of the history of philosophy.<sup>9</sup>

In 1904, Zipkin became the first female member of the German Pathological Society [Deutsche Pathologische Gesellschaft (DPG), today known as the Deutsche Gesellschaft für Pathologie (DGP)]. One year later, she gave a lecture at the annual DPG event titled 'Hyalinähnliche kollagene Kugeln als Produkte epithelialer Zellen in malignen Strumen' ('Hyaline-like collagen orbs as products of epithelial

<sup>&</sup>lt;sup>5</sup>Matriculation numbers 8098 and 8099, StA Bern (Bern State Archives), BB IIIb.

<sup>&</sup>lt;sup>6</sup>Rahel Zipkin, 'Beiträge zur Kenntnis der gröberen und feineren Strukturverhältnisse des Dünndarms von Inuus Rhesus', *Anatomische Hefte* 23 (1903), 113–85.

<sup>&</sup>lt;sup>7</sup>Meeting of 26 November 1902, StA Bern (Bern State Archives), BB 05.10.02, 230; Exam with Miss Rahel Zipkin from Minsk, StA Bern (Bern State Archives), BB 05.10.34, 121.

<sup>&</sup>lt;sup>8</sup>Election of Rahel Zipkin as the third assistant at the Institute of Pathology of the University of Bern, StA Bern (Bern State Archives), RRB 4742/1902; Election of Rahel Zipkin as the second assistant at the Institute of Pathology of the University of Bern, StA Bern (Bern State Archives), RRB 3822/1902.

<sup>&</sup>lt;sup>9</sup>Biermanns and Groß, *op. cit.* (note 2), 227–9; A. Agaimy, 'Dr. med. Rahel Zipkin. Die Schicksalsreise einer außergewöhnlichen Pionier-Pathologin von Minsk über Bern nach Nürnberg', in Deutsche Gesellschaft für Pathologie e.V. (ed.), *Pathologie im Wandel – Betrachtungen zum 120-jährigen Jubiläum der DGP* (DGP: Berlin, 2017), 38–41; J. Aiden Carney, 'Hyalinizing Trabecular Tumors of the Thyroid Gland: Quadruply Described but Not by the Discoverer', *The American Journal of Surgical Pathology*, 32 (2008), 622–34; Bernd Höffken, *Schicksale jüdischer Ärzte aus Nürnberg nach 1933* (Berlin: Metropol, 2013), 322–3; Franziska Rogger, *Der Doktorhut im Besenschrank: Das abenteuerliche Leben der ersten Studentinnen – am Beispiel der Universität Bern* (Bern: eFeF, 1999), 164–75; Barbara Bachmann and Elke Bradenahl, 'Medizinstudium von Frauen in Bern 1871–1914' (unpublished MD thesis: University of Bern, 1990), 64.

cells in malignant goitre'), likewise as the very first female expert.<sup>10</sup> The renowned pathologist Ludwig Aschoff (1866–1942) was impressed by her pioneering work: 'Until today, I had not wanted to believe in the epithelial origins of the hyalin, but I will now pay special attention to this'.<sup>11</sup> Zipkin published the results of her research in the renowned academic journal *Virchows Archiv*.<sup>12</sup> Pathologist J. Aiden Carney was also impressed by her research: 'who, a century previously, had provided a meticulous description of the type of hyalin-producing thyroid tumour that I thought my colleagues and I had introduced in 1987'.<sup>13</sup>

The focus of Zipkin's research was the pathology of giant cells in inflammations and tumours, the structural relationship of the small intestine of the rhesus monkey ('Inuus Rhesus'), the appearance of fat in the muscles of the body and the adeno-rhabdomyoma of the lungs. Zipkin regularly published works in *Virchows Archiv* until 1909, most before she turned 30.<sup>14</sup> In 1906, she left the University of Bern, where she was succeeded by the pathologist Sophia Getzowa (1872–1946) in the fall of the same year.<sup>15</sup>

Zipkin took up residence in Berlin as of 1907. One year later, she married the Nuremberg specialist physician for dermatology, venerology and urology Karl Adam Rodler (1877–1935) and assumed his name. Karl Rodler was considered 'Aryan' according to the National Socialist understanding and was therefore not affected by the regime's disenfranchisement and oppression. The couple moved to Nuremberg in 1908/9 and opened a medical practice that Karl Rodler led, including a laboratory for medical diagnostics run by Rahel Rodler. On 20 December 1909, the couple had a daughter, which they named Johanna. Rodler continued to enjoy professional recognition, with her lectures and pathology demonstrations held at mostly regional medical societies being regularly mentioned in communications by the regional physician's association in Nuremberg. In 1916, she was even awarded the Bavarian König-Ludwig-Kreuz for her special service to the well-being of the state.<sup>16</sup>

Rodler converted to Christianity in 1925. While a considerable proportion of German Jews like Rodler entered so-called 'mixed marriage' with a Christian and their descendants mostly also became Christians, conversion to Christianity was rather an exception in the Weimar Republic: In that period, about two hundred people converted from Judaism to Protestantism every year (only very few chose Catholicism)<sup>17</sup> – in contrast, in the period from 1871 to 1909, about fifteen thousand conversions to the Christian faith (about four hundred per year) are documented.<sup>18</sup>

In the Third Reich in 1935, the Nuremberg Laws considered her marriage as a 'privileged mixed marriage' on account of their child whose father was 'Aryan'. As a result, Rodler initially did not suffer

<sup>13</sup>Carney, op. cit. (note 9), 627.

<sup>&</sup>lt;sup>10</sup>Zipkin and Aschoff, 'Mitgliederliste der Deutschen Pathologischen Gesellschaft', Verhandlungen der Deutschen Pathologischen Gesellschaft, 8 (1904), 191–4; Rahel Zipkin and Ludwig Aschoff, 'Vortrag Fräulein Zipkin-Bern u. Diskussion Herr Aschoff', Verhandlungen der Deutschen Pathologischen Gesellschaft, 9 (1905), 153–4; Biermanns and Groß, op. cit. (note 2); Agaimy, *ibid*.

<sup>&</sup>lt;sup>11</sup>Zipkin and Aschoff, *ibid*.

<sup>&</sup>lt;sup>12</sup>Rahel Zipkin, 'Hyalinähnliche collagene Kugeln als Produkte epithelialer Zellen in malignen Strumen', Virchows Archiv für Pathologische Anatomie und Physiologie und für Klinische Medizin, 182 (1905), 374–406.

<sup>&</sup>lt;sup>14</sup>Zipkin, *op. cit.* (note 6); Zipkin and Aschoff, *op. cit.* (note 10); Zipkin, *op. cit.* (note 12); Rahel Zipkin, 'Auftreten von Fett in der Körpermuskulatur bei Durchquetschung des Halsmarkes', Virchows Archiv für Pathologische Anatomie und Physiologie und Klinische Medizin 185, (1906), 478–83; Rahel Zipkin, 'Über Riesenzellen mit randständigen Kernen in Sarkomen', Virchows Archiv für Pathologische Anatomie und Physiologie und Klinische Medizin, 186 (1906), 240–58; Rahel Zipkin, 'Über ein Adeno-Rhabdomyom der linken Lunge und Hypoplasie der rechten bei einer totgeborenen Frucht', Virchows Archiv für Pathologische Anatomie und Physiologie und Klinische Medizin, 187 (1907), 244–64; Rahel Zipkin, 'Über einen Fall von akuter großzelliger lymphatischer Leukämie mit generalisierter Hauterkrankung', Virchows Archiv für Pathologische Anatomie und Physiologie und Klinische Medizin, 197 (1909), 135–67.

<sup>&</sup>lt;sup>15</sup>Biermanns and Groß, op. cit. (note 2), 227–9; Rogger, op. cit. (note 9), 198–212; Carney op. cit. (note 9), 627.

<sup>&</sup>lt;sup>16</sup>Biermanns and Groß, op. cit. (note 2), 227–9; Agaimy, op. cit. (note 9); Höffken, op. cit. (note 9); Carney op. cit. (note 9), 627.

<sup>&</sup>lt;sup>17</sup>Werner Fölling, Zwischen deutscher und jüdischer Identität. Deutsch-jüdische Familien und die Erziehung ihrer Kinder an einer jüdischen Reformschule im 'Dritten Reich' (Wiesbaden: Springer, 1995), 90.

<sup>&</sup>lt;sup>18</sup>Volker Rolf Berghahn, Imperial Germany, 1871–1914: Economy, Society, Culture and Politics, (New York: Berghahn Books, 1995), 102–3.

from anti-Semitic repression by the National Socialists despite her Jewish ancestry. She would, however, ultimately lose this protection in October 1935 when her husband passed away. She was forced to cede guardianship over her grown daughter, who suffered from a mental condition. She was permitted to keep running her laboratory (from her home) for some time. 'Racial' discrimination directed at her person and the associated, ever-growing boycotts against her profession finally led Rodler to give this up in 1938. Her licence to practice medicine was ultimately revoked upon the passing of the Reich's Citizen Law in July 1938, followed by the plunder of her laboratory in the wake of the pogroms on 9 November of the same year. As of 1 September 1941, Rodler was forced to wear the 'Star of David' badge. She was arrested by the Gestapo not long thereafter. On 17 January 1944, Rodler was transferred from Nuremberg to Theresienstadt Ghetto on the last Jewish transport.<sup>19</sup> After the German invasion of Poland in 1939, such ghettos were set up to temporarily station Jews living in these areas before deporting them to extermination camps.<sup>20</sup> Established in 1941, Theresienstadt Ghetto in German-occupied Czechoslovakia was not only used as a transit camp, but also portrayed as 'settlement' for elderly Jews by the Nazi propaganda in order to conceal their real fates.<sup>21</sup> About thirty-three thousand people died in Theresienstadt, primarily from malnutrition, disease, execution or suicide.<sup>22</sup> It was here that Rodler, at the age of 66, passed away on 15 April of the same year under circumstances that remain unknown.<sup>23</sup> Documentation only exists of her cremation the following day.<sup>24</sup>

## Ruth Silberberg, née Katzenstein (1906–97) – an exceptional career as an experimental pathologist in the United States

Experimental pathologist Ruth Katzenstein (Figure 1) was born in Kassel on 20 March 1906, as the daughter of Jewish parents. Her father, Ludwig Katzenstein (\*1879), was an industrialist, and her mother was Käthchen Katzenstein, née Plaut (\*1884).<sup>25</sup> She studied medicine at the universities of Freiburg im Breisgau, Berlin, Göttingen, Vienna and Breslau. She passed the state medical exam in 1931 and obtained per doctorate in Breslau for her work 'Untersuchungen über die Umwandlungsfähigkeit der Lymphzellen' ('Studies into the transformational capability of lymph cells'), published in *Virchows Archiv.*<sup>26</sup> Katzenstein went on to work as an assistant at the Institute of Pathology at the University of Breslau, where she met her academic lecturer and subsequent (Jewish) husband Martin Silberberg.<sup>27</sup>

On account of their Jewish ancestry, Ruth Katzenstein and Martin Silberberg were removed from their positions in 1933 upon passing of the 'Law on the Restoration of the Professional Civil Service' and worked at the Jewish hospital in Breslau for a short period of time. The couple got married in December 1933. Facing growing anti-Semitic disenfranchisement, the Silberbergs emigrated in 1934, first going to Canada, where both found positions at the Department of Pathology at Dalhousie University in Halifax, Nova Scotia – Ruth Silberberg as a volunteer and her husband as an Andrew Carnegie Fellow. The couple

<sup>&</sup>lt;sup>19</sup>Transport of 18 June 1943 to Theresienstadt, Arolsen Archives, 8227402, Doc. ID 11195023.

<sup>&</sup>lt;sup>20</sup>Christopher R. Browning, 'Before the "Final Solution": Nazi ghettoization policy in Poland (1940–1941)', in *Ghettos 1939–1945. New Research and Perspectives on Definition, Daily Life and Survival. Symposium Presentations* (Washington DC: United States Holocaust Museum, 2005), 1–13.

<sup>&</sup>lt;sup>21</sup>Matthew R. Smallman-Raynor and Andrew D. Cliff, 'Theresienstadt: A Geographical Picture of Transports, Demography, and Communicable Disease in a Jewish Camp-Getto, 1941–45', *Social Science History*, 444, 4 (2020), 615–39.

<sup>&</sup>lt;sup>22</sup>Ibid.

<sup>&</sup>lt;sup>23</sup>Biermanns and Groß, op. cit. (note 2), 266–70; Agaimy, op. cit. (note 9); Höffken, op. cit. (note 9); Carney op. cit. (note 9), 627.

<sup>&</sup>lt;sup>24</sup>Cremation – Terezín: Rodler, Dr Anna, Arolsen Archives, 11422001, Doc. ID 5114391 – Anna Rodler.

<sup>&</sup>lt;sup>25</sup>Biermanns and Groß, *op. cit.* (note 2), 266–70; Notarization of the marriage between Ludwig Katzenstein and Kätchen Plaut from 4 September 1953, HLA/HHStAW (Hessian State Archives Wiesbaden), Personenstandsregister Kassel; W. Röder and H.A. Strauss (eds), *International Biographical Dictionary of Central European Emigrés 1933–1945, Vol. II/Part 2: The Arts, Sciences, and Literature* (München: Saur, 1983), 1081.

<sup>&</sup>lt;sup>26</sup>Ruth Katzenstein, 'Untersuchungen über die Umwandlungsfähigkeit der Lymphzellen', Virchows Archiv für pathologische Anatomie und Physiologie und Klinische Medizin, 281, 1 (1931), 172–90.

<sup>&</sup>lt;sup>27</sup>Biermanns and Groß, op. cit. (note 2), 266–70; Röder and Strauss, op. cit. (note 25).



Figure 1. Ruth Silberberg at the reception for the Martin Silberberg Memorial Fund Exhibit, April 1967. Washington University School of Medicine Library, April 14, 1967 (VC083008); reproduced with kind permission of the Becker Medical Library, Washington University School of Medicine.

then spent a short period in Panama, where Martin Silberberg assumed a position at the university there.  $^{\rm 28}$ 

The couple immigrated to the United States in 1937 (Figure 2). They found positions at the Department for Pathology at the Washington University School of Medicine in St. Louis, Missouri, under Leo Loeb (1869–1959), whom Martin Silberberg had known from previous stays abroad. Apart from a position linked to a fellowship from 1941 to 1944 at New York University, the couple continued their careers at Washington University – Martin until his death in 1966 and Ruth until 1975. The Silberbergs worked closely alongside one another for their entire lives and conducted research on topics such as the aging process and osteoarthritis. They also both practiced clinical medicine: Ruth Silberberg was a senior pathologist at the Barnard Skin and Cancer Hospital in St. Louis from 1946 to 1947 before assuming the same role at the City Hospital, where she worked until 1959. From 1956 to 1959, she was also a senior pathologist at the Missouri Pacific Hospital. While at the City Hospital, Ruth worked together with her husband, who acted as a senior pathologist there from 1945 until his death.<sup>29</sup>

During her time at Washington University, Ruth Silberberg's career advanced considerably. She was promoted from instructor to assistant professor in 1950 and to associate professor 7 years later. Finally, in 1968, 2 years after the passing of her husband, Ruth Silberberg assumed the position of Full Professor of Pathology. Starting in 1969, she also worked as a senior pathologist at the Barnes Jewish Hospital in St. Louis. She kept both positions until entering emeritus status in 1975. Despite her advanced years, Silberberg did not lose sight of her passion: Upon emigrating to Jerusalem, she continued to dedicate herself to medical research for many years. Ruth Silberberg passed away from cancer in 1997 at the old age of 91.<sup>30</sup>

<sup>&</sup>lt;sup>28</sup>Biermanns and Groß, *op. cit.* (note 2), 266–70; Röder and Strauss, *op. cit.* (note 25); Uhlendahl *et al.*, *op. cit.* (note 1), 5–7. <sup>29</sup>Biermanns and Groß, *op. cit.* (note 2), 266–70; Röder and Strauss, *op. cit.* (note 25); Uhlendahl *et al.*, *op. cit.* (note 1), 5–7; Petition for Naturalization No. 422031: Martin Silberberg, NARA (National Archives and Records Administration), RG 21/5700802; Petition for Naturalization No. 422032: Ruth Silberberg, NARA (National Archives and Records Administration), RG 21/5700802; Transcript: Ruth Silberberg (Washington University School of Medicine Oral History Project, 1976); available online at http://beckerexhibits.wustl.edu/oral/transcripts/silberberg.html (last accessed 29 June 2022). <sup>30</sup>Ibid.

TATES CO AMERICA 4572 TRIPLICATE UNITED STATES OF AMERICA DECLARATION OF INTENTION (Invalid en years after The United States of America District In th Eastern District of Missouri United States dSt. Louis. Ruth Silberber I. Louis residing at 4535 Lindell Bivd. patichedical Research Hwite, 100 w residing at . 3 th that my pers do de lor of eyes Blue color White SerFemale. dinm nds; visible distinctive color of hair Brown inches; weight 36 height 5 t 2 None nationality German Hebrew on March 20 I was born in Kassel Germany 006 married. The T am atBrealau,Germany ried on Necember 27. 193 born at Rybuik. Germany at New Offenne, La. resides at St. Toula, Mo the United States on Oatober 1895 for p anuary 11." 1937 nce therein, and nor e and pla e of birth, Mo d place of resider ce of each of said child I hav BOL .... heretofore made a declaration of intention: Number my last foreign residence was Panama City", Republic of I emigrated to the United States of America from Diristobal Canal Panas 7.00 ent residence in the United States was at New my lawful entry for pern under the name of Ruth Silberberg 1 937 SS Metapan on the vessel ..... a I will, before being admitted to citizenship, renounce forever all allegiance and fidelity to any foreign prince, potentate, state, or sovereignty, and particularly, by name, to the prince, potentate, state, or sovereignty of which I may be at the time of admission a citizen or subject; I am not an anarchist; I am not a polygamist nor a believer in the practice of polygam; and it is my intention in good faith to become a citizen of the United Stat certify that the photograph affixed to the duplicate and triplicate hereo manently s of A nd to th of in a liker ess of me: So HELP ME GOD. tilberter with Clark of mid Court e in the anno Domini 187 th20th day of July Mo. the from Certification No. 12-14900 the lawful entry of the and Naturaliz sioner of Immigration larant for perman on the date stated above, has be by me The 65675 of the Ruth Lilberberg ŝ U. S. DEPARTMENT OF LAB

Figure 2. Declaration of Intention of Ruth Silberberg, 20 July 1937. NARA (National Archives and Records Administration), RG 21/5700802; public domain.

During her time in the United States, Ruth Silberberg was an elected member of various medical research associations, including the American Society for Experimental Pathology, the Society for Experimental Biology and Medicine, the Gerontological Society of America, the Society for Developmental Biology, the American Society of Human Genetics and the St. Louis Pathological Society.<sup>31</sup>

<sup>31</sup>Ibid.

#### Lotte Strauss (1913-85) - discoverer of Churg-Strauss syndrome

Jewish pathologist Lotte Strauss (Figure 3) was born in Nuremberg on 15 April 1913, daughter of merchant Ernst Strauss (1877–1968) and his wife Hedwig Strauss (1887–1982), née Fichtelberg. She commenced her medical studies in 1932 at the universities of Freiburg im Breisgau and Munich. At the age of just 20, Strauss had to flee to Italy to escape persecution by the National Socialists. While there, she completed her degree at the University of Siena in 1937 and received her doctorate with a Dr med. at the Institute for Bacteriology.<sup>32</sup> When the fascist regime in Italy likewise passed racist laws in 1938, the 24-year-old Strauss emigrated to the United States (Figure 4), where she held a position as a resident assistant in bacteriology at the Beth Israel Hospital in New York until 1941.<sup>33</sup>

Influenced by a contact she made in the United States with renowned pathologist Sydney Farber (1903–73), Strauss moved from the area of bacteriology to pathology. She went through a number of short career phases in her new field: she was a medical intern at the New York Infirmary from 1941 to 1942, she completed a residency in pathology at Mount Sinai Hospital in New York with Paul Klemperer (1887–1964) from 1942 to 1943 and she did another residency at the Children's Hospital in Boston, Massachusetts, from 1943 to 1944. Strauss obtained her U.S.-American citizenship in 1944 and married Jewish pathologist Peter Grünwald (1912–79), to whom she remained married until 1949. After completing her position in Boston, Strauss returned to Mount Sinai Hospital and worked there as a fellow in pathology until 1947 and then as a resident assistant in bacteriology until 1949. She then



Figure 3. Portrait of Lotte Strauss. F.P.F. De Campos and S.A. Geller, Churg–Strauss Syndrome: a syndrome described on clinical observation and autopsy findings, *Autopsy and Case Reports*, 3, 2 (2013), 1–4; reproduced with kind permission of Stephen A. Geller, MD.

<sup>&</sup>lt;sup>32</sup>Biermanns and Groß, *op. cit.* (note 2), 291–3; M.T. Ramieri and M. Marino, 'Strauss, Lotte (1913–1985)', in J.G. van den Tweel (ed.), *Pioneers in Pathology* (Utrecht: Springer, 2017), 499–501; Jaques Cattell Press, *American Men and Women of Science*, 5th edn (New York: Bowker, 1986), 1088.

<sup>&</sup>lt;sup>33</sup>Biermanns and Groß, *op. cit.* (note 2), 291–3; Ramieri and Marino, *ibid.*; Jaques Cattell Press, *ibid.*; Petition for Naturalization No. 277158: Lotte Strauss, NARA (National Archives Records Administration) RG 21/3000057.

	10.85		
1	400000		
1.88	TRIPLICATE No. 4265390		
100	(To be given to declarant) UNITED STATES OF AMERICA		
	J. DECLARATION OF INTENTION		
1.1.2	je DECLARATION OF INTENTION (Invalid for all purposes seven years after the date hereof)		
PTAT	TE OF NEW YORK		
sou	THERN DISTRICT OF NEW YOR SS: In the DISTRICT . Co		
	of UNITED STATES at NEW YORK, W. Y		
	I,LOTTE_STHAUSS now residing at160		
•	occupation		
	Ser for the second description description for the second description descriptin description description descriptin description descriptin descr		
	color of hair brown		
	raceio browinstitutionality		
	I was born in <u>Nuren born</u> (2) many		
	I am not married. The name of my wife or husband is		
	we were married on; at; at; she or he w		
	nt (City or term) (Reis or source), On (City or term) (Reis or source) (Re		
	resides at (Churd term) (Marin ), On (Marin ), (Day) (Term), for permanent residence therein, and no		
	we were married on		
~			
	· ·		
	I havenot heretofore made a declaration of intention: Number, on		
	ana and a declaration of intention: Number		
	ana and a declaration of intention: Number		
	ana and a declaration of intention: Number		
	A inverter interctorer made a declaration of intention: Number		
	A inverter interctorer made a declaration of intention: Number		
	at		
	at		
	A inverted		
	A inverted		
	A invertee interview in the statements I have made and the interview of the statements I have made and the interview of the statements I have made and the interview of the statement of interview of the statements I have made and the interview of the statement of interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement is the statements I have made and the interview of the statement is the statement is the statement is the statement of the statement is the statemen		
	A invertee interview in the statements I have made and the interview of the statements I have made and the interview of the statements I have made and the interview of the statement of interview of the statements I have made and the interview of the statement of interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement of the statements I have made and the interview of the statement is the statements I have made and the interview of the statement is the statement is the statement is the statement of the statement is the statemen		
	at		
	at		
551	A inverted in heretolore made a declaration of intention: Number		
8551	A inverted in heretolore made a declaration of intention: Number, on		
248551	A inverted in heretolore made a declaration of intention: Number		
248551	A inverted in heretolore made a declaration of intention: Number		
º 248551	A inverted in the declaration of intention: Number , 00, 00		
Nº 248551	A inverte in the second		
Nº 248551	A inverted   Interestore made a declaration of intention: Number   00   00     at   my last foreign residence wasGiena italy   00   00   00     I emigrated to the United States of America from -Leflayre - France   00   00   00   00     under the name of Lotte -Strause   00   00   00   00   00   00     on the vessel		
N <sup>o</sup> 248551	A inverted in heretolore made a declaration of intention: Number		
Nº 248551	A invence in heretolore made a declaration of intention: Number		
Nº 248551	A invence in heretolore made a declaration of intention: Number, On		

Figure 4. Declaration of Intention of Lotte Strauss, 23 December 1938. NARA (National Archives Records Administration) RG 21/3000057; public domain.

transferred to Lebanon Hospital in the Bronx, New York, where she worked as an assistant pathologist until 1952/3.<sup>34</sup>

Her breakout career moment occurred in 1951: Together with Jacob Churg (1910–2005), she discovered and described the so-called eosinophil granulomatosis with polyangiitis a granulomatous inflammation of the blood vessels, since known as Churg–Strauss syndrome. She returned to Mount

<sup>&</sup>lt;sup>34</sup>Biermanns and Groß, *op. cit.* (note 2), 291–3; Ramieri and Marino, *op. cit.* (note 32); Jaques Cattell Press, *op. cit.* (note 32).

Sinai Hospital in 1953 where she again worked with Klemperer, who encouraged her to specialise in the area of paediatric pathology. After that, she continued on as an associate pathologist in paediatric pathology until 1966. She also worked at the College of Physicians and Surgeons at Columbia University, where she advanced to the position of assistant professor. She remained on the faculty here until 1966. Strauss was involved in the founding of the Society for Pediatric Pathology in 1965, after which point she assumed the position of Full Professor of Pathology at the Mount Sinai School of Medicine in New York. She also worked as a consultant for paediatric pathology and, starting in 1971, as a specialist consultant in perinatal pathology at the National Institute of Neurological Disorders at City Hospital Center in Elmhurst, Illinois. She kept these positions until her death on 4 July 1985.<sup>35</sup>

Lotte Strauss is considered to be a pioneer in paediatric and perinatal pathology. In 1983, she was awarded the Jacobi Medal from the Mount Sinai Alumni; since 1986, the Society for Pediatric Pathology, which she co-founded, has been awarding the Lotte Strauss Prize, as a posthumous honour – the society is the successor of the Pediatric Pathology Club, to which Strauss also belonged. During her life, Strauss held numerous memberships and offices, such as at the New York Pathological Society, the American Association of Pathologists, the International Academy of Pathology, the New York Academy of Sciences and the New York Pediatric Society.<sup>36</sup>

#### Zelma Wessely, née Apfelbaum (1914–2004) – clinician and tumour researcher

Jewish pathologist Zelma Apfelbaum was born in Kraków (then Austria and present-day Poland) on 7 June 1914. She commenced her studies in medicine at the University of Vienna in the winter semester of 1932/3. Upon Austria's 'Anschluss' (annexation) into the German Reich in March 1938, Apfelbaum was forced to end her studies early on account of her Jewish ancestry (Figure 5).<sup>37</sup> She emigrated to Great Britain in 1938. She continued her studies at the University of Manchester. After completing her degree, Apfelbaum went on to work in Manchester as a house physician. In 1942, she married her peer Hans Wessely (\*1913), who had also immigrated to Manchester from Vienna.<sup>38</sup> Having since gained British citizenship, Zelma Wessely returned to Vienna between 1950 and 1952 and subsequently emigrated to the United States via Manchester, where she and her husband settled in the Bronx, New York.<sup>39</sup>

 <sup>&</sup>lt;sup>35</sup>Biermanns and Groß, op. cit. (note 2), 291–3; Ramieri and Marino, op. cit. (note 32); Jaques Cattell Press, op. cit. (note 32);
Eberhard Jürgen Wormer, Angiologie – Phlebologie: Syndrome und ihre Schöpfer (München: Medikon, 1991), 23–5.
<sup>36</sup>Ibid.

<sup>&</sup>lt;sup>37</sup>Uhlendahl *et al.*, *op. cit.* (note 1); Zelma Apfelbaum, UAW (Wien University Archives), Med, Nat, 1933–1938; Hugo Gold, *Geschichte der Juden in Österreich: Ein Gedenkbuch* (Tel Aviv: Olamenu, 1971), 175; Herbert Posch, Doris Ingrisch and Gert Dressel, *'Anschluβ' und Ausschluss 1938: Vertriebene und verbliebene Studierende der Universität Wien* (Wien: Lit, 2008), 356, 499; Katharina Kniefacz, 'Zelma Apfelbaum (Wessely)', Gedenkbuch für die Opfer des Nationalsozialismus an der Universität Wien 1938; available online at https://gedenkbuch.univie.ac.at/page/1/person/zelma-apfelbaum-wessely (last accessed 29 June 2022).

<sup>&</sup>lt;sup>38</sup>Biermanns and Groß, *op. cit.* (note 2), 311–13; Zelma Apfelbaum, UAW (Wien University Archives), Med, Nat, 1933– 1938; July–September 1942, Wessely, England and Wales Marriage Registration Index; January–March 1964, England and Wales Death Registration Index; Cunard White Star Limited, Names and Descriptions of British Passengers embarked at the Port of Southampton, NA (British National Archives), BT 26/1282/143; Female Enemy Alien – Exemption from Internment-Refugee, Wessely, Zelma, NA (British National Archives), HO 396/101; Male Enemy Alien – Exemption from Internment-Refugee, Wessely, Hans, NA (British National Archives), HO 396/114; Census of England and Wales, 1911, NA (British National Archives), RG 14/23993; Registration District and Sub-District 464–2, NA (British National Archives), RG 101/4471D; Registration District and Sub-District 465-2, NA (British National Archives), RG 101/4624I.

<sup>&</sup>lt;sup>39</sup>Biermanns and Groß, *op. cit.* (note 2); Kniefacz, *op. cit.* (note 37); Gold, *op. cit.* (note 37); Posch, Ingrisch and Dressel, *op. cit.* (note 37); July–September 1942, Wessely, England and Wales Marriage Registration Index; January–March 1964, England and Wales Death Registration Index; Cunard White Star Limited, Names and Descriptions of British Passengers embarked at the Port of Southampton, NA (British National Archives), BT 26/1282/143; Female Enemy Alien – Exemption from Internment-Refugee, Wessely, Zelma, NA (British National Archives), HO 396/101; Male Enemy Alien – Exemption from Internment-Refugee, Wessely, Hans, NA (British National Archives), HO 396/114; Census of England and Wales, 1911, NA (British National Archives), RG 14/23993; Registration District and Sub-District 464-2, NA (British National Archives), RG 101/4471D; Registration District and Sub-District 465-2, NA (British National Archives), RG 101/4624I.

ALLER AND ALLER	Boc. und Buname des Studierendens ZELMA APFELBAUM	
te arbem bratilig teabore Boriftering, Die Organe ber ausbentigten Boberber mit emschiftet, Retinnete mit ichlecht tesborer Entrangen gerächzumellen.	Verzeichnis der Vorlefungen, welche der Studierende zu hören beabsichtigt.	
	Gegenstand der Boelefung Bundengabi Name bes Dogenten	
Nationale	Leygiene 5 Derokan	
für ordentliche Borer der medizinischen Fakultät.		
Ber und Buname bes Studierenden: ZELINA APFELBAUM	Pericette Hed. Skeuter	
Stantsbargeridest: Cyren Oak. Neth Hossely	Prychiatrie 3 Pobyl	
Deimataguftändigheit (Ort und Eand): / Gien Oib.	Paper. hist. Demonstrations 1 Feller Path. Quat: " I Feller	
Seburtaers und cand		
Coburtebaten (742, Monat, 30%): 7. Juni 1214	Path auget u. hist: Votres 2 Pricel	
Mutterpresed. deubsch	I gray an mit poto hourse	
Tettagenthrighting field.	Sopieling to Connecticity of Acutor per	
Religion Rinde ober Renfellion Woon. Bochungenbergie bes Steherenber: (Robertungen islerber etablister bekannt)	Pathol. Septemberry en 4 Branner	
gebeni)		
Barname. Stand und Wohnert frince Jouan, Ayeut, Wien "	Liquidierung der Quäftur:	
Name, Stand und Wohnert feines	Bon der Jahlung des Rollegiengeldes bald – gang Unfallverfichen, Anforgebeitrag S r	
Bis melder vebranstalt wurde das letter Miinderstfab Wjeu Som. 1932	befreit laut Befreib nom 19 . Senalsbemilligung com AB / Rufmandebrittag	
Steht im öffentlichen Dienite?	and the second s	
Genießt ein Stipendham (Stiftung) im Betroge von S g verlieben von 193 . 3.	1 ON LA Matriketion	
verlikken von Verlikken for Branhage att ackher her Stabierense He Samatrisalaster der Alterien meintett	about all Rollingingeld	
ester Beikrepton anjortist: Angelleaum Delume	Universitäts anammen S r	
	Win -	

Figure 5. Matriculation file of Zelma Wessely in the last semester before emigration. Zelma Apfelbaum, UAW (Wien University Archives), Med, Nat, 1933–1938; reproduced with kind permission of the Vienna University Archives.

In 1954, Zelma Wessely gained her licence to practice medicine and became a citizen of the United States in 1957. Until the end of the 1980s, she worked as a pathologist at the Department of Pathology at the Queens Hospital Center in New York City, where she also had a very active research career. In this period, she published approximately thirty pieces of research, mostly as a co-author. Though she had diverse research areas, she dedicated a significant amount of time to researching tumours. Wessely worked on retroperitoneal desmoid, thymus tumours, haemangioma, malignant melanoma, neoplasms in female reproductive organs, embolisms, lung tuberculosis, myocardial hypertrophy, fibromuscular hyperplasia, myocardial sarcoidosis, transhepatic cholangiography, lupus erythematosus, actinomycosis and the thromboses.<sup>40</sup> Zelma Wessely passed away on 22 May 2004 at the age of 89 in New York.<sup>41</sup>

# Between bans and repression: the 'female academic' in the German Reich until the takeover of the National Socialists and the experiences of Rodler, Silberberg, Strauss and Wessely

What distinguishes these four women in terms of their professional careers and gender? Can we identify any parallels in terms of their biographies, such as common career factors or similar experiences of discrimination and repression, or do they each represent singular, incomparable biographies? To address these questions, it would be useful to first review the development of medical university studies among (Jewish) women in the German-speaking world at the time.

Prior to 1900, German women wishing to pursue degrees were forced to do so abroad, as universities in Germany only admitted men. For those interested in pursuing a degree in medicine or dentistry, most

<sup>&</sup>lt;sup>40</sup>Biermanns and Groß, *op. cit.* (note 2), 311–13; Posch, Ingrisch and Dressel, *op. cit.* (note 37).

<sup>&</sup>lt;sup>41</sup>Biermanns and Groß, *op. cit.* (note 2), 311–13; Kniefacz, *op. cit.* (note 37); Posch, Ingrisch and Dressel, *op. cit.* (note 37); Home Aide Convicted of Stealing \$1.5 Million from Doctor, 88, *The New York Times*, 15 July 2006, B2.

went to Switzerland or to the United States.<sup>42</sup> It was not until the end of the nineteenth century that the 'question of women' (their acceptance to medical degree courses) became a serious topic of discussion among the German public. One contributing factor behind this was the first wave of the women's movement, whose proponents advocated for the voting, employment and educational rights of women. Nevertheless, this movement fundamentally still remained anchored to conservative notions of the woman in her role as a mother. Moreover, many male professors remained decidedly opposed to the admittance of women into degree courses in medicine and dentistry – embedded in the fact that the women's movement, with its increasing success, also produced an increasing number of opponents in general.<sup>43</sup> Starting around 1900, the German Reich (1871–1918) finally permitted women to pursue degrees in medicine. While women were eventually deemed to be suitable for at least serving as physicians to other women and to children over time, few supported the idea of women pursuing academic careers in the area of medicine.<sup>44</sup> As such, hardly any women held post-doctoral degrees permitting them to serve as university professors in the 1930s.

It is noteworthy that Jewish women were initially overrepresented among women studying medicine. There were several reasons for this: First, the so-called liberal professions (physician, dentist and lawyer) were particularly desirable among the Jewish population as they offered a stable financial basis without the need to work as civil servants for the state (an option often not available to Jewish individuals). Additionally, many Jewish families wanted their daughters to also have access to higher education. Two factors were important here: Many among the Jewish population considered a university education and career, and an independent life, to be a value in itself and therefore desirable. Moreover, it was certainly not easy for Jewish women in Germany to find a suitable husband of Mosaic belief. This was due to the fact that the vast majority of young Jewish women married a partner from their own religious community, thus drastically reducing the number of potential husbands. As such, it was all the more important for daughters who would remain unmarried to achieve professional and financial independence through higher education.<sup>45</sup>

Jewish female university students did, however, have to contend with exclusion and discrimination from the very beginning. They were, for example, excluded from joining certain student associations.<sup>46</sup> During the Weimar Republic (1919–33), this exclusion only increased, culminating in the complete ban of Jewish university students under the Third Reich.<sup>47</sup> Once licences were no longer granted to 'non-Aryan' medical students in October 1933, compounded by the requirement of holding a medical licence

<sup>&</sup>lt;sup>42</sup>E. Brinkschulte (ed.), Weibliche Ärzte: die Durchsetzung des Berufsbildes in Deutschland (Berlin: Hentrich, 1993); Johanna Bleker, Der Eintritt der Frauen in die Gelehrtenrepublik: Zur Geschlechterfrage im akademischen Selbstverständnis und der wissenschaftlichen Praxis am Anfang des 20. Jahrhunderts (Husum: Matthiesen, 1998); J. Bleker, 'Frauenpraxis: Die Berufsrealität deutscher Ärztinnen bis zum Beginn der Weimarer Republik', in T. Maurer (ed.), Der Weg an die Universität: Höhere Frauenstudien vom Mittelalter bis zum 20. Jahrhundert (Göttingen: Wallstein, 2010), 236–51; Dominik Groß, Die schwierige Professionalisierung der deutschen Zahnärzteschaft (1867–1919) (Frankfurt am Main: Lang, 1994); Dominik Groß, Die Geschichte des Zahnarztberufs in Deutschland: Einflussfaktoren – Begleitumstände – Aktuelle Entwicklungen (Berlin: Quintessenz, 2019), 63.

<sup>&</sup>lt;sup>43</sup>*Ibid.*; C. Bruns, 'Vertreibt der weibliche Zugang zum Logos den Eros? Zu einer erstaunlich aktuellen Debatte unter Studentinnen der 1920er Jahre', in U. Auga *et al.* (eds), *Das Geschlecht der Wissenschaften. Zur geschichte von Akademikerinnen im 19. und 20. Jahrhundert* (Frankfurt/New York: Campus Verlag, 2010), 43–74.

<sup>&</sup>lt;sup>44</sup>T. Maurer, 'Einführung: Von der Gleichzeitigkeit des Ungleichzeitigen: Das deutsche Frauenstudium im internationalen Kontext', in T. Maurer (ed.), *Der Weg an die Universität: Höhere Frauenstudien vom Mittelalter bis zum 20. Jahrhundert* (Göttingen: Wallstein, 2010), 7–22.

<sup>&</sup>lt;sup>45</sup>Johanna Bleker and Sabine Schleiermacher, Ärztinnen aus dem Kaiserreich: Lebensläufe einer Generation (Weinheim: Deutscher Studienverlag, 2000), 65; Claudia Huerkamp, Bildungsbürgertum. Frauen im Studium und in akademischen Berufen 1900–1945 (Göttingen, Vandenhoeck & Ruprecht, 1996), 25–6.

<sup>&</sup>lt;sup>46</sup>A. Hoffmann-Ocon, 'Pionierinnen – Mitstreiterinnen – Ausgegrenzte: Jüdische Lehrerinnen und Studentinnen in Deutschland', in T. Maurer (ed.), *Der Weg an die Universität: Höhere Frauenstudien vom Mittelalter bis zum 20. Jahrhundert* (Göttingen: Wallstein, 2010), 211–35.

<sup>&</sup>lt;sup>47</sup>Hoffmann-Ocon, *ibid.*; U. Ferdinand, 'Vertreibungen im Umgestaltungsprozess der Medizinischen Fakultäten an deutschen Universitäten im "Dritten Reich", in T. Beddies, S. Doetz and C. Kopke (eds), *Jüdische Ärztinnen und Ärzte im Nationalsozialismus: Entrechtung, Vertreibung, Ermordung* (Berlin/Boston: De Gruyter, 2014), 117–48.

in order to obtain a post-doctoral degree entitling one to serve as a professor, medical studies were no longer attainable for Jewish men and women in Germany.<sup>48</sup> Just 1 year prior to this, in the winter semester of 1932/3, women made up about one-third among all Jewish students. Female students also made up about one-third of Jewish students in the field of medicine. This figure was indeed significantly higher than the overall gender balance among all medical students – Jewish and non-Jewish – with females making up about 20%.<sup>49</sup> To put this into relation, it is helpful to have a look at the total number of Jews in Germany: According to the census of June 1933, the German Reich had a population of about sixty-five million and half a million professed the Jewish faith.<sup>50</sup>

How do the life paths of the four pathologists investigated here relate to the context of female students at the time as well as the academic landscape for Jewish students in general? As many girls from affluent Russian and German families, Rahel Rodler went to liberally oriented Switzerland to study in Bern. From 1882 to 1913, the portion of women students at all Swiss universities was a remarkable 19%, 62% of whom were from the Russian Empire, 74% of which studied at one of the medical faculties.<sup>51</sup> Another remarkable fact is that Rodler was the first female member of the German Pathological Society as early as 1904, and likewise allowed to give lectures, at a time when not all places in Germany even allowed women to enter university. Along with her extraordinary academic performance, this also owed to the support she received from her benefactor, Theodor Langhans.

Ruth Silberberg enrolled herself at university in 1925, at a relatively advantageous point in time, and was therefore able to complete her degree by 1931, before the National Socialists assumed power in 1933 and before the accompanying phase of political repression. She would, however, be forced to leave her position as an assistant 2 years later.

Lotte Strauss, on the other hand, entered university in 1932, but would have to interrupt her studies in less than a year in the wake of the National Socialists' ascent to power. The fact that she immediately emigrated out in 1933, at the age of 20, is as noteworthy as the fact that she once again had to flee from anti-Semitism 1 year after obtaining her degree from Siena in 1937, ultimately reassuming her career in the United States.

As an Austrian, Zelma Wessely was first confronted with the brunt of National Socialist repression in 1938, when the country was annexed by Germany. Up to that point, she had studied medicine for ten semesters in Vienna. As anti-Semitic measures were applied immediately in the wake of Austria's 'Anschluss' at universities across the country, she was forced to hastily emigrate at the age of 23. She was also only able to complete her degree once abroad.

# Career development despite barriers: the further life paths of Rodler, Silberberg, Strauss and Wessely

Just how did these four women enter professional life and develop their careers as pathologists? To answer this question, we must also consider the existing professional conditions in Germany at the time.

Choosing the medical professional also had significant private implications for these early female physicians, alongside the aforementioned social and institutional barriers they faced<sup>52</sup>: Nearly half of the first generation of female physicians remained unmarried. For the other half, which did marry, we can identify a notable development: Around 60% ended up marrying a colleague (another physician) from their profession. In some cases, this fact had far-reaching consequences: For the couples who sought to open a medical practice, typically only the husband was considered in the allocation of an official medical insurance-accredited licence; despite her own academic degree, the woman in this constellation officially

<sup>&</sup>lt;sup>48</sup>Ferdinand, *Ibid.*, 133.

<sup>&</sup>lt;sup>49</sup>Kröner, *op. cit.* (note 4).

<sup>&</sup>lt;sup>50</sup>W. Gruner (ed.), *The Persecution and Murder of the European Jews by Nazi Germany*, 1933–1945. Volume 1: German Reich 1933–1937 (München: De Gruyter Oldenbourg, 2008), 36.

<sup>&</sup>lt;sup>51</sup>Daniela Neumann, Studentinnen aus dem Russischen Reich in der Schweiz (1867–1914) (Zürich: Hans Rohr, 1987), 17–18.

<sup>&</sup>lt;sup>52</sup>Bleker and Schleiermacher, op. cit. (note 45), 210.

remained unemployed or rather merely 'worked for' her husband. This widely applied regulation during the Weimar Republic did not only apply to Jewish physicians but to German physician couples in general.<sup>53</sup> The situation faced by academics was no less challenging: Female physicians, provided they were not single, also had to find a way to harmonise their career development with their social role as a wife and a mother. Academic visibility and recognition were, as such, only possible for women of extraordinary talent and output.<sup>54</sup>

Female physicians had received a greater degree of recognition in the scope of the First World War, as they often had to assume positions at hospitals and medical practices on account of a lack of men, who were serving in the war. This made the fact of women in the medical professions more common, to some degree, thereby at least temporarily increasing the acceptance of female physicians. The situation did, however, remain difficult. While the Weimar constitution officially prescribed the equal treatment of men and women in terms of access to scientific institutions and public offices,<sup>55</sup> the reality on the ground was quite different. In the view of the male-dominated medical profession, the increasing number of women in medical professions was clearly seen to be an issue. This led to the fact that after 1918, war veterans in particular (and thus male doctors) were given preference in filling public positions recognised by the health insurance funds. After 1932, female doctors married to income-earning husbands were removed from public positions. Under the Third Reich, the displacement of women from the medical professions became even more pronounced. Even female physicians who were highly successful or those with teaching licences at universities were often fired in favour of their ascending male colleagues, a fact that has been proven for women in the area of dentistry.<sup>56</sup> Many clinics also refrained from hiring female physicians.<sup>57</sup> The basis of this development was the patriarchal politics of National Socialism, in which women were seen primarily in their role as mothers and housewives. Women were required to fulfil their duty as mothers for the good of the 'Volksgemeinschaft' (people's community). Additional activities intended for women were primarily related to involvement in Nazi associations.58

The anti-Semitic repression measures introduced by the National Socialist regime – for women *and* men – were even more dramatic: One in five physicians were removed from their professions due to their 'non-Aryan' background. Three stages led to the full-fledged elimination of Jewish individuals from the medical professions: First, the events immediately after the National Socialists came to power in 1933. On 1 April, a large-scale boycott of Jewish stores and banks, as well as the establishments of lawyers and physicians, took place. Defamatory posters were put up in front of the respective facilities, and in some cases, they were also graffitied or damaged. One week later, the 'Law on the Restoration of the Professional Civil Service' was enacted, enabling the rulers to dismiss Jewish and 'politically unreliable' civil servants from the service. With further decrees of 24 April and 4 and 6 May, this regulation was also extended to employees and workers. Exceptions were made for frontline fighters in the First World War and for women whose husbands had died in said war. Finally, by decree of 22 April, all 'non-Aryan' or allegedly communist physicians had their health insurance licences revoked.<sup>59</sup> The 'Bund Deutscher

<sup>&</sup>lt;sup>53</sup>Ibid.

<sup>&</sup>lt;sup>54</sup>J. Buchin, 'Die mühsame Suche nach den "weiblichen Ärzten": Zur Entstehungsgeschichte der Dokumentation: Deutsche Ärztinnen im Kaiserreich', in E. Brinkschulte (ed.), *Weibliche Ärzte: Die Durchsetzung des Berufsbildes in Deutschland* (Berlin: Edition Hentrich, 1993), 156–8.

<sup>&</sup>lt;sup>55</sup>Bleker 2010, *op. cit.* (note 42), 250–1; J. Bleker, 'Anerkennung oder Unterordnung? Ärztinnen und Nationalsozialismus', in E. Brinkschulte (ed.), *Weibliche Ärzte: Die Durchsetzung des Berufsbildes in Deutschland* (Berlin: Edition Hentrich, 1993), 126–35.

<sup>&</sup>lt;sup>56</sup>Dominik Groß, 'Maria Schug-Kösters (1900–1975) – Erste habilitierte Zahnärztin in Deutschland', *Zahnärztliche Mitteilungen*, 111, 3 (2021), 263–6; Dominik Groß and Julia Nebe, 'Elsbeth von Schnizer (1900–1998) – Kieferorthopädin und Professorin mit Karrierebruch', *Zahnärztliche Mitteilungen*, 111, 4 (2021), 276–9.

<sup>&</sup>lt;sup>57</sup>Bleker, op. cit. (note 55), 127.

<sup>&</sup>lt;sup>58</sup>Michael Wildt, 'Volksgemeinschaft', Informationen zur politischen Bildung, 314, 1 (2012), 46–62.

<sup>&</sup>lt;sup>59</sup>S. Doetz and C. Koepke, 'Die antisemitsichen Kampagnen und Verfolgungsmaßnahmen gegen die jüdische Ärzteschaft seit 1933', in T. Beddies, S. Doetz and C. Kopke (eds), *Jüdische Ärztinnen und Ärzte im Nationalsozialismus: Entrechtung, Vertreibung, Ermordung* (Berlin/Boston: De Gruyter, 2014), 36–57.

Ärztinnen' (Association of German female Physicians), which was concerned for its existence in the face of blatant gender discrimination, aligned itself and excluded all Jewish members as of July 1933.<sup>60</sup>

The second stage was essentially marked by the anti-Semitic 'Nuremberg Laws' (1935), which resulted in Jewish physicians being dismissed from service at public and free non-profit hospitals.<sup>61</sup>

Finally, the events of 1938 marked the definitive end of Jewish medical practice in Germany. With the 'Anschluss' of Austria in march, the anti-Semitic measures were extended to the Jews of the neighbouring country.<sup>62</sup> The fourth decree of the 'Reich Citizenship Law' issued on 25 July caused the cancellation of the medical licence of Jewish physicians as of 30 September. A few were still allowed to treat Jewish patients exclusively. The final step marked the November pogroms on 9 and 10 November 1938, in the course of which various Jewish facilities were destroyed and Jews were arrested on a large scale and deported to concentration camps – a development that ultimately led to the Holocaust.<sup>63</sup>

Bringing these aspects together, Jewish women thus had to deal with both anti-Semitic and gender discrimination.<sup>64</sup>

All four of the women investigated here were married for at least some period of time, and thereby exposed to the gender role conflicts outlined above. This situation would later bring with it numerous challenges in the post-war period and, particularly in Germany, was only recognised and addressed as a serious issue for gender politics much later.<sup>65</sup> Rahel Rodler had a daughter who suffered from a mental issue that required additional assistance in order for her to live her life. She is the only one among the four female pathologists, who has been known to have had children. At the time of her daughter's birth, the compatibility of family and career was hardly given for women, since the German Empire envisioned the role of women as housewife and mother<sup>66</sup> – at the same time, as already described, Rodler was already in an unusual professional situation for women. Nevertheless, Rodler had given up her academic profession 3 years before her daughter was born and dedicated herself to pathology as a medical practice. Interestingly, she apparently did not make this decision (on her own): According to Carney, she instead did so 'in accordance with the wishes of her family'.<sup>67</sup> As such, the reason for the early end of her university career was directly rooted in traditional patterns of thinking, marked by an opposition between family and one's academic career.

It is also notable that the husbands of all four were likewise physicians, and pathologists in some cases. This fact was even at times a definitive advantage: Martin Silberberg, for example, acted as an instructor and patron for his later wife, Ruth, and, following their emigration, the couple worked closely alongside one another. Raher Rodler, for her part, indirectly benefited from the medical career of her husband: The diagnostic laboratory housed at his medical practice offered her the opportunity to continue her medical laboratory work, even if not in an academic environment. She also did not appear as a scientific author after 1909.

Lotte Strauss was certainly an exception in this regard, as she entered into a marriage with Peter Grünwald only after completing her professional development and divorcing him after a few years. Strauss ultimately achieved success in her medical career without the help of a husband. Moreover, she was more successful and reached a higher position than her short-time husband, who was an associate professor.<sup>68</sup>

<sup>68</sup>W. Röder and H.A. Strauss (eds), *International Biographical Dictionary of Central European Emigrés 1933–1945, Vol. II/Part 1: The Arts, Sciences, and Literature* (München: Saur, 1983), 1140; Uhlendahl *et al., op. cit.* (note 1), 3.

<sup>&</sup>lt;sup>60</sup>Bleker and Schleiermacher, op. cit. (note 45).

<sup>&</sup>lt;sup>61</sup>Doetz and Koepke, op. cit. (note 59).

<sup>&</sup>lt;sup>62</sup>Kröner, op. cit. (note 4); Uhlendahl et al., op. cit. (note 1), 2-6.

<sup>&</sup>lt;sup>63</sup>Doetz and Koepke, op. cit. (note 59).

<sup>&</sup>lt;sup>64</sup>Anna von Villiez, 'The Emigration of Women Doctors from Germany Under National Socialism', *Social History of Medicine*, 22, 3 (2009), 553–67.

<sup>&</sup>lt;sup>65</sup>Buchin, *op. cit.* (note 54), 156; Birgit Hibbeler and Heike Korzilius, 'Arztberuf: Die Medizin wird weiblich', *Deutsches Ärzteblatt*, 105, 12 (2008), 609–12.

<sup>&</sup>lt;sup>66</sup>Bleker and Schleiermacher, *op. cit.* (note 45), 12.

<sup>&</sup>lt;sup>67</sup>Carney, op. cit. (note 9), 627.

In summary, the four women in this study confirm the rule that contemporary female physicians often either married a professional colleague (such as Rodler, Silberberg and Wessely) or (as Strauss) spent the formative years of their (professional) lives without a partner.

#### Continuity or disruption? The careers of Silberberg, Strauss and Wessely after emigration

Johanna Bleker estimates the number of female physicians persecuted by the National Socialists at around six hundred individuals. Provided that they managed to emigrate, most were unable to successfully resume their careers in their new home countries.<sup>69</sup> In Great Britain, German medical degrees were not acknowledged until the end of 1940, which means that emigrated physicians either had to study again (which was only possible in Edinburgh, Scotland) or work as nurses. With the recognition of German qualifications, relicensing became easier, provided one had not emigrated further to another destination in the meantime.<sup>70</sup> In the United States, there were special licence boards for the relicensing of emigrated physicians, for which the conditions varied widely among the individual states. In general, the local professional politicians tended to work against the emigrant physicians, as they were perceived as competitors to American physicians in economically difficult times. Thus, new licencing was often based on an arbitrary application of the law.<sup>71</sup> Basically, good conditions for physicians were offered by the U.S. East Coast, above all New York. Until 1936, foreign medical degrees were generally recognised there; later, except in a few cases, physicians had to pass subsequent examinations. Professional policy in the United States accepted emigrant physicians almost exclusively in cases of particularly outstanding performance or if there was a corresponding need in a particular field.<sup>72</sup>

To what extent do these observations apply to the émigrés in this study (Silberberg, Strauss and Wessely), or do they, in fact, represent an exception to the rule?

Rodler, for her part, is a special case in that she did *not* forcibly emigrate after 1933 but rather remained in Germany, and with lethal implications, as she was deported to the Theresienstadt ghetto, where she died. While Rodler had immigrated to Switzerland from Russia in 1896, this was a conscious, planned and temporary and did not share the commonality of forced migration after 1933.

The cases of Silberberg, Strauss and Wessely, on the other hand, were different. Despite the difficulties faced by women in the medical professions, Silberberg held a position as an assistant at the Institute for Pathology at the University of Breslau from 1931 to 1933 before emigrating. Strauss and Wessely, in contrast, were only able to commence their medical careers after emigrating. Ultimately, all three were highly successful in their new homelands and did indeed distinguish themselves from their majority of immigrant female (and male) physicians, whose careers lost steam or even came to a halt altogether.<sup>73</sup>

In general, one may note that the destination countries for Silberberg, Strauss and Wessely (the United States and Great Britain) were places in which women were already accepted at universities, either by the first half (United States) or the second half (Great Britain) of the nineteenth century; however, this did not apply to all fields and the women's movements in these two countries had to fight

<sup>&</sup>lt;sup>69</sup>Bleker, op. cit. (note 55), 127-8.

<sup>&</sup>lt;sup>70</sup>A.E. von Villiez, 'Emigration jüdischer Ärzte im Nationalsozialismus', in T. Beddies, S. Doetz and C. Kopke (eds), *Jüdische Ärztinnen und Ärzte im Nationalsozialismus: Entrechtung, Vertreibung, Ermordung* (Berlin/Boston: De Gruyter, 2014), 190–202.

<sup>&</sup>lt;sup>71</sup>Uhlendahl *et al.*, op. cit. (note 1), 11–12; ibid.; Linda Lucia Damskis, Zerrissenne Biografien: Jüdische Ärzte zwischen nationalsozialistischer Verfolgung, Emigration und Wiedergutmachung (München: Allitera, 2009), 12–13, 90–2, 190–3; Eric Kohler, 'Relicensing Central European Refugee Physicians in the United States: 1933–1945', Simon Wiesenthal Center Annual, 6 (1989), 2–32.

<sup>&</sup>lt;sup>72</sup>Uhlendahl *et al.*, *op. cit.* (note 1), 11–12; Kohler, *ibid.*; Kathleen M. Pearle, 'Ärzteemigration nach 1933 in die USA: Der Fall New York', *Medizinhististorisches Journal*, 19, 1/2 (1984), 112–37.

<sup>&</sup>lt;sup>73</sup>Bleker, *op. cit.* (note 55), 127–8.

for women to be admitted to each university separately.<sup>74</sup> Against this backdrop, one may assume that citizens in both destination countries were long accustomed to female academics, which likely had a positive influence on their social acceptance.

In the United States, women were able to obtain licences to practice medicine as of 1912, a process that was, however, complicated by the fact that these had to be approved by examination committees comprised completely of men.<sup>75</sup> As a general rule, the openness of the all-male governing bodies towards women in academic professions across Europe and the United states depended heavily on the employment market: The more professionals were needed at a given time, the more these men were inclined to accept women in certain professional fields.<sup>76</sup> In the United States, in particular, universities were in search of pathologists. Sziranyi et al. and Uhlendahl et al. have shown that the majority of female and male pathologists who emigrated out of the Third Reich were (successfully) able to resume their careers here.<sup>77</sup>

Silberberg, Strauss and Wessely clearly benefitted from these generally favourable conditions. In their specific case as pathologists, gender was not the determining factor in the United States, rather the need for professionals in the area of pathology – and demand was sufficiently high.<sup>78</sup> At the same time, it would be erroneous to assume that the United States enjoyed wide-reaching gender equality at the time. While the situation for women there was more beneficial than in Nazi Germany or in the subsequent Federal Republic under Adenauer, Silberberg, Strauss and Wessely owed their career success, first and foremost, to their own performance and the fact that they had acquired expertise in a specialised area. Silberberg became an expert in experimental pathology, particularly skeletal growth and aging and the pathogenesis of osteoarthritis, Strauss went on to become a pioneer in paediatric and perinatal pathology and Wessely developed her specialty in clinical medicine and also focused on tumour research. As such, these three women were not only able to find positions as pathologists, they also established formidable careers. This conclusion also corresponds with recent findings related to the early university careers of female German dentists: The rise of the first emerging female researchers to professorships was likewise primarily based on the development of specialised expertise and unique differentiators, such as in the areas of paediatrics and orthodontics.<sup>79</sup> The example of dentists shows - also regardless of gender - that specialisation and expertise were of essential importance for a successful career as an emigrated physician (especially in the United States). American competition among non-specialised dentists was so high that many German emigrants were forced to work as dental technicians or in completely different professions.<sup>80</sup> Overall, among all medical disciplines, about two-thirds of the German emigrants in the United States were able to reach the position of a full professor, which is a considerable number.<sup>81</sup> Among the pathologists (male and female) who emigrated to the United States, as many as 77% reached this position.<sup>82</sup> With regard to female physicians as a whole, Villiez found that they had significantly better

<sup>&</sup>lt;sup>74</sup>Ilse Costas, 'Die Öffnung der Universitäten für Frauen: Ein internationaler Vergleich für die Zeit vor 1914', *Leviathan*, 23, 4 (1995), 496–516; P. Mazón, 'Die erste Generation von Studentinnen und die Zulassung der "besseren Elemente" 1890–1914', in U. Auga *et al.* (eds), *Das Geschlecht der Wissenschaften: Zur Geschichte von Akademikerinnen im 19. und 20. Jahrhundert* (Frankfurt/New York: Campus Verlag, 2010), 113–26.

<sup>&</sup>lt;sup>75</sup>Costas, *ibid*.

<sup>&</sup>lt;sup>76</sup>Ibid., 508–9.

<sup>&</sup>lt;sup>77</sup>Sziranyi et al., op. cit. (note 1); Uhlendahl et al., op. cit. (note 1).

<sup>&</sup>lt;sup>78</sup>Ibid.

<sup>&</sup>lt;sup>79</sup>Dominik Groß, 'Herta Byloff-Clar (1914–2008) – erste Universitätsdozentin für Kieferorthopädie in Österreich', *Zahnärztliche Mitteilungen* 111, 5 (2021), 374–7; Dominik Groß, 'Gisela Schützmannsky (1920–2013) – die erste Professorin für Kinderzahnheilkunde an einer deutschen Universität', *Zahnärztliche Mitteilungen*, 111, 7 (2021), 610–13; Dominik Groß, 'Dorothea Dausch-Neumann (1921–2013) – Die erste Lehrstuhlinhaberin in der deutschen Zahnheilkunde', *Zahnärztliche Mitteilungen*, 111, 8 (2021), 714–17.

<sup>&</sup>lt;sup>80</sup>Uhlendahl *et al.*, op. cit. (note 1), 12; Michael Köhn, *Zahnärzte 1933–1945. Berufsverbot, Emigration, Verfolung* (Berlin: Edition Hentrich, 1994), 57–61; Matthis Krischel and Dominik Groß, 'Zahnärzte als Täter und Verfolgte im "Dritten Reich", *Zahnärztliche Mitteilungen* 110, 1–2 (2020), 24–7.

<sup>&</sup>lt;sup>81</sup>Damskis, *op. cit.* (note 71), 87–92.

<sup>&</sup>lt;sup>82</sup>Uhlendahl et al., op. cit. (note 1), 2, 10.

prospects for continuing their careers in emigration than women from other professions – although many female physicians also made professional sacrifices in favour of their husbands.<sup>83</sup> The latter makes Silberberg, Strauss and Wessely once again outstanding personalities.

#### Persecuted female pathologists under National Socialism: a quantitative classification

We finish by offering a quantitative comparison in order to better classify the *vitae* of the female pathologists investigated here within the overall context of the persecution, displacement and emigration of Jewish professionals. At 3.4% (4 of 118 individuals), the portion of persecuted female (nearly all Jewish) pathologists<sup>84</sup> is significantly *lower* than the proportion of women within the Jewish medical field. Before 1933, there were about 572 female Jewish doctors in the Reich, which represented 8.8% of all Jewish physicians (about six thousand five hundred individuals). We know that in 1932, there were about three thousand, four hundred women doctors overall in Germany out of the approximately fifty-thousand physicians of both genders (6.8%).<sup>85</sup> The per cent of women among Jewish medical students enrolled in the winter semester of 1932/3 did, however, amount to 29%,<sup>86</sup> a number that shows just how few women later specialised in the area of pathology.

Of these 118 pathologists, the migration of ninety-one is evidenced, two-thirds of which (n = 60) went to the United States.<sup>87</sup> In other words, there was one woman for every thirty male pathologists who emigrated in general and, when considering those who went to the United States, this number falls to one in every twenty. This also makes the careers of Silberberg, Strauss and Wessely quite exceptional. They established themselves in a male-dominated area and developed into female role models as well as pioneers in their field.

As most male pathologist émigrés,<sup>88</sup> Strauss and Wessely settled on the East Coast of the United States, where the admittance conditions were comparatively liberal; moreover, the East Coast was home to numerous and well-endowed universities and clinics, offering promising chances for employment. As such, cities on the East Coast, along with Chicago, were the preferred destinations for émigré physicians.<sup>89</sup> Silberberg was an exception here, having settled in the Midwest to pursue a career at Washington University in St. Louis, Missouri. Her choice likely largely had to do with the fact that her husband, Martin Silberberg was not, however, academically dependent on her husband. On the contrary, her career continued to advance following the passing of Martin Silberberg; in fact, she achieved her highest position, as Full Professor of Pathology, just 2 years *after* the death of her husband.

Of the sixty pathologists who immigrated to the United States, forty-seven were university professors, of which thirty achieved the position of Full Professor.<sup>90</sup> The three female pathologists in our study perfectly reflect this statistic: Silberberg and Strauss represented the two out of three who pursued university careers, and both achieved the position of full professor. In contrast, Wessely conducted her research at a hospital, where clinical medicine took priority.

The fact that Rodler was the only one of the four pathologists who did not emigrate likely had to do with her specific situation: After Hitler assumed power, she kept herself under the protection of her 'Aryan' husband and, at the time of his sudden death, she was already 57 years old. Here, it would also be worth making a comparison with the overall collective of pathologist forced to emigrate. Of the

<sup>&</sup>lt;sup>83</sup>Villiez, op. cit. (note 64), 564.

<sup>&</sup>lt;sup>84</sup>Sziranyi et al., op. cit. (note 1); Uhlendahl et al., op. cit. (note 1), 2-6.

<sup>&</sup>lt;sup>85</sup>Villiez, op. cit. (note 64), 558; Johanna Bleker and Christine Eckelmann, 'Der Bund Deutscher Ärztinnen (BDÄ) 1933 bis 1936', Die Ärztin 61, 3 (2014), 6–8.

<sup>&</sup>lt;sup>86</sup>Ibid., 11.

<sup>&</sup>lt;sup>87</sup>Uhlendahl et al., op. cit. (note 1), 2-6.

<sup>&</sup>lt;sup>88</sup>Ibid.

<sup>&</sup>lt;sup>89</sup>Villiez, op. cit. (note 70); Uhlendahl et al., op. cit. (note 1), 10; Pearle, op. cit. (note 72).

<sup>&</sup>lt;sup>90</sup>Uhlendahl *et al.*, *op. cit.* (note 1), 2.

pathologists born before 1880, we only have evidence of two individuals successfully emigrating.<sup>91</sup> Remaining in the Third Reich at an advanced age, despite persecution by the National Socialist regime, can, in most cases, be explained by strong rootedness to one's homeland, decreased willingness (or ability) to adapt to a new context in a foreign country (in terms of language, culture or research environment) as well as accumulated financial reserves and needs to provide for others, which many feared would be lost be emigrating. Younger physicians, on the other hand, literally had less to lose, making it easier for them to set out on a new beginning.<sup>92</sup> The matter of rootedness surely played a decisive role in Rodler's case as she had a daughter with a mental disability that required special care.

### Conclusion

The results of this study lead us to the conclusion that Rahel Rodler, Ruth Silberberg, Lotte Strauss and Zelma Wessely managed to assert themselves and become pioneers in the male-dominated field of pathology. As Jewish women, they suffered from traditional gender inequality imposed by German society and the academic medical field as well as anti-Semitism under the National Socialist regime and the resulting process of disenfranchisement. While Rahel Rodler ultimately faced death in Theresienstadt, the other three pathologists managed to establish themselves as role models professionally and academically upon emigration also. Rodler achieved this as the very first women to be a member of the German Pathologist and Wessely through her double focus as a clinician and a published academic. We should also highlight that Silberberg and Strauss advanced to the highest position of Full Professor in the university context. None of these four pathologists). All of them shone on account of their personal determination, professional passion and sustained performance. This made each one of them become a symbol for the emancipation of their contemporary female academics.

Acknowledgement. We would like to thank the two anonymous reviewers for their helpful and constructive feedback.

Competing interest. The authors have no competing interests to declare.

**Funding.** This paper has been written as part of the research project on the 'Role of Pathology and its Representatives in the Third Reich'. The project aims to bring the victims of National Socialism back into the collective memory and was financially supported by the German Society of Pathology (DGP).

<sup>&</sup>lt;sup>91</sup>*Ibid.*, 3–5.

<sup>&</sup>lt;sup>92</sup>H. Embacher, 'Vertreibung und Emigrationserfahrungen mit Fokus auf Akademiker und Akademikerinnen 1934–1945', in J. Koll (ed.), 'Säuberungen' an österreichischen Hochschulen 1934–1945: Voraussetzungen, Prozesse, Folgen (Wien/Köln/ Weimar: Böhlau, 2017), 91–120.

Cite this article: Uhlendahl H, Kaiser S, Biermanns N, Groß D (2022). Pioneers in pathology and female role models: the Jewish scientists Rahel Rodler, Ruth Silberberg, Lotte Strauss and Zelma Wessely. *Medical History* 66: 304–322, https://doi.org/ 10.1017/mdh.2023.2