

***Guided Critical Reflection Activities for...***  
**AAMC Seminar**  
**“Legacy of Medicine During the Holocaust and its  
Contemporary Relevance”**  
**AAMC Jan. 27**  
**International Holocaust Remembrance Day**

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**Option 1**

**Close looking:**

**Reflection with visual art and writing**

A wide-angle photograph of a beach at sunset. The sun is a bright orange orb on the horizon, casting a long, shimmering reflection across the water. The sky transitions from a deep orange near the horizon to a pale, clear blue at the top. The beach is dark and silty, with gentle waves lapping at the shore. In the foreground, a white wooden railing with square balusters runs across the bottom of the frame, suggesting the viewer is looking out from a balcony or walkway.

The Breath...Intention

“We do not learn from experience...  
we learn from reflecting on experience”



*Head of the Medical Student*  
Picasso, 1907

Source: MOMA, [www.moma.org](http://www.moma.org)

Ὀμνυμι Ἀπολλῶνα ἠτρών καὶ Ἀσκληπιόν  
καὶ Ὑγείαν καὶ Πανακείαν καὶ θεοὺς πάντας τε  
καὶ πᾶσας, ἰσθόρος ποδύμενος, ἐπιτελέα ποιῶσιν  
καταδύσαντες καὶ κρίσιν ἐπιτίνθοκοι τόνδε καὶ  
συγγρασὶν ἐπὶ πύξασθαι μὲν τὸν διδάξαντα  
με τήν τε τέχνην ταύτην ἵσα γενέτησι μὲν ἐμοῖς,  
καὶ θεοῖσι καὶ δαίμοσι καὶ ἀθανάτοισιν ἀνθρώποις  
μετάφωσιν ποιῶσθαι, καὶ γενος τοῦ ἐξ αὐτοῦ  
ἀδελφοῖσιν ἐπιπικρνεῖν ἄφρασι, καὶ διδάσκειν  
τήν τε τέχνην ταύτην, τὴν χρησῶσι μανθάνειν, ἄνευ  
μισθοῦ καὶ συγγραφῆς, παρσὺ γελίτις τε καὶ ἄλλοις



*The Refugee*  
Felix Nussbaum, 1939

Source: Yad Vashem,  
<https://www.yadvashem.org/yv/en/exhibitions/nussbaum/refugee.asp>



*Self Portrait with  
Jewish Identity Card*  
Felix Nussbaum, 1943

Source: Yad Vashem,  
<https://www.yadvashem.org/articles/general/felix-nussbaum.html>

**Reflect on your experience, including emotional experience of today's seminar on *legacy of the role of medicine during the Holocaust and its contemporary relevance.***

**1) How does the content relate to your being and becoming a physician? If relevant, discuss how the content relates to any professional experience thus far...**

**OR**

**2) Write... (on whatever struck you related to content of today's seminar)**



*“Echoes of the Holocaust”*

truth in science, resource allocation, lives  
“worthy” of living?...

**COVID19**



**What do fairness and justice mean,  
our ethical obligations within severe times. Moral distress?**



***"Indifference, for me, is the Epitome of Evil"*** Elie Wiesel

**Equipped with & Sustaining a Moral Compass  
for Inevitable Dilemmas/Tensions...**

**HOW DO YOU LIVE A COMMITMENT TO...**

**--Science & Truth**

**--Monitor Competing/Dual Loyalties**

**--Achieve Appropriate Distance in the  
Physician-Patient Relationship**

**--Use Power/Hierarchy Appropriately in  
Teams, the Physician-Patient Relationship,  
etc., avoiding abuse of power**

**--Maintain Humanistic Person-  
Centered Care  
& Moral Leadership**

**--Guard Against Indifference with  
ETHICAL VIGILANCE**

**--ETHICAL RESPONSIBILITY TO  
THE OTHER**



# **Option 2**

# **Historical case-based written reflections**

A wide-angle photograph of a beach at sunset. The sun is a bright orange orb on the horizon, casting a long, shimmering reflection across the water. The sky transitions from a deep orange near the horizon to a pale, clear blue at the top. The beach is dark and sandy, with some sparse vegetation in the foreground. A white wooden railing with square balusters runs across the bottom of the frame, framing the view of the ocean.

The Breath...Intention

“We do not learn from experience...  
we learn from reflecting on experience”

Libertas Haas-Heye &  
Harro Schulze-Boysen  
1935



[https://www.dhm.de/lemo/bestand/objekt/f71\\_256](https://www.dhm.de/lemo/bestand/objekt/f71_256)

*“As a last wish I have asked  
that my ‘material substance’ be left to you.  
If possible, bury me  
in a beautiful place amidst sunny nature.”*



last letter to her mother, Libertas Schulze-Boysen  
22 December 1942

A letter from Charlotte Pommer, MD who was assistant to Professor Hermann Stieve, Chair of Anatomy Berlin:

*“On 22<sup>nd</sup> of December 1942 eleven men were hanged and five women decapitated. Fifteen minutes later they were laid out on the dissection tables in the anatomical institute.*

*[She] lay on the first table, [...]  
on the third table the big lifeless body of her husband [...]*

*I felt paralyzed and could hardly assist Professor Stieve, who – as always – carried out his scientific exploration with great care and uncommon diligence [...]*

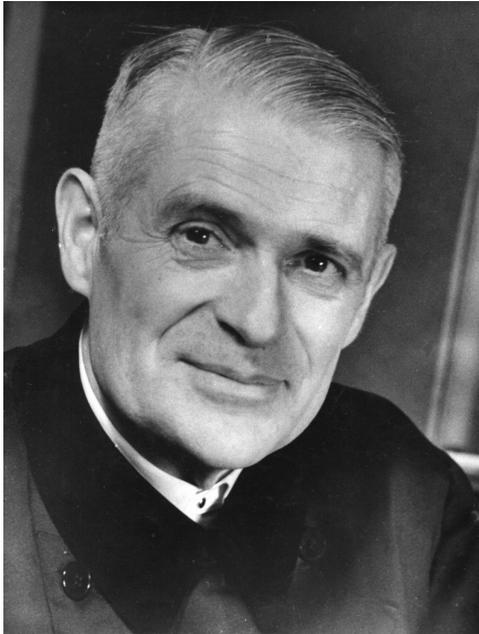
*After the impressions of that night, I resigned from my position.”*

(Pommer 1967/1981: Letters to Alexandra von Alvensleben, IFZ ED162)

## Hermann Stieve's research

Chair, Department of Anatomy

University Berlin 1935-1952, not NSDAP member



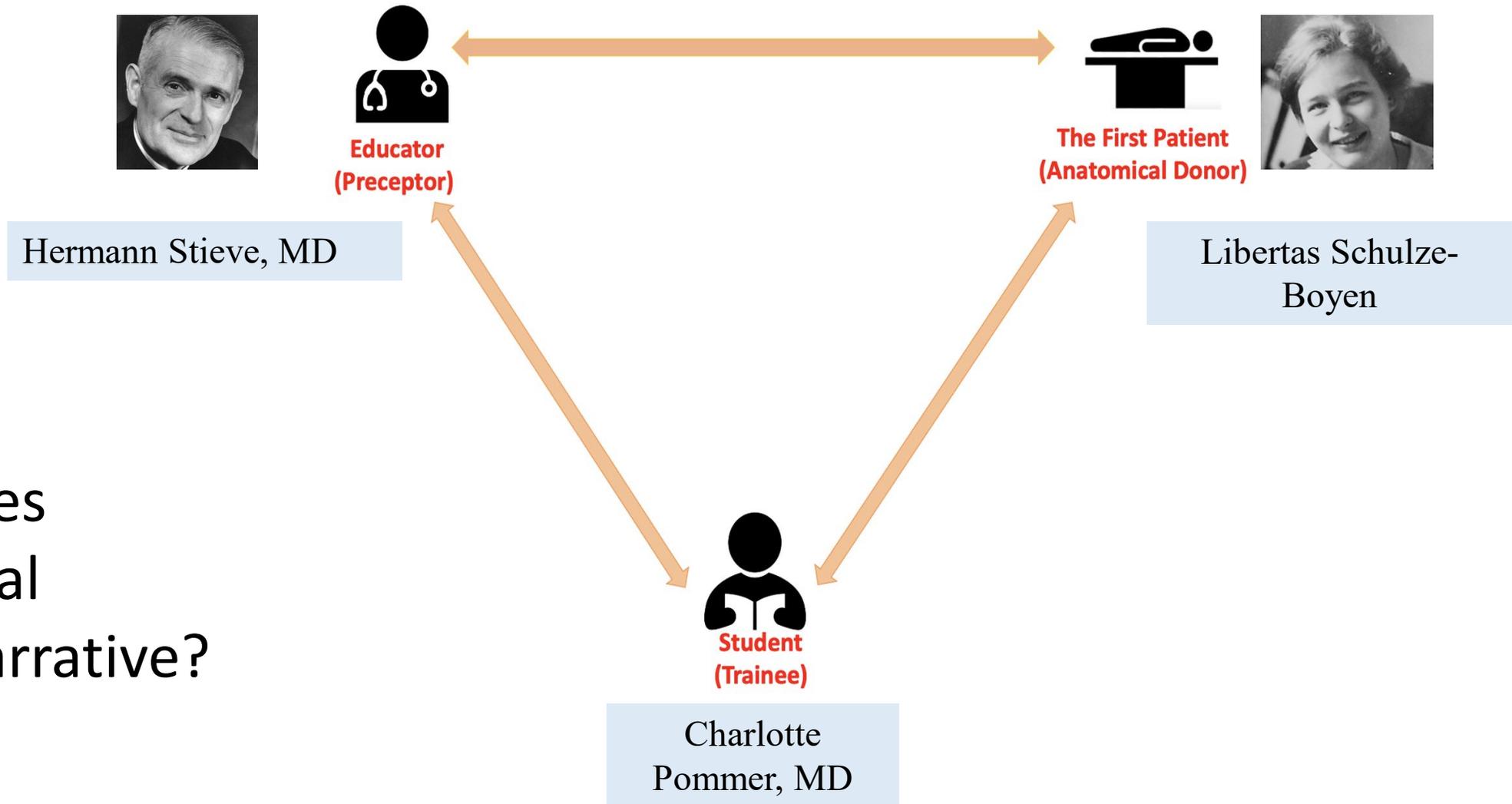
**Hermann Stieve**  
(1886-1952)

Dissected several hundred bodies of the executed

- Before 1920: animal research on the influence of the nervous system and stress on the male and female reproductive system
- 1920s: Interpreted the situation of death-row inmates as reflection of his animal experiments (imprisonment and fear of execution as stressors)  
Research on executed men
- from 1935 on executed women: effect of severe psychological trauma on menstruation patterns and morphology of reproductive organs

(Winkelmann A, Schagen U. 2009. Hermann Stieve's clinical-anatomical research on executed women during the "Third Reich." Clin Anat 22:163–171.)

What role does each individual play in this narrative?



Select one individual from this narrative and write for 3-5 minutes in the first-person from their perspective.

Share with a partner for 10 minutes.

What made you chose the person you wrote about?  
What do you think motivated these three to their behavior?  
What insights or themes came up?

# Epilogue

Charlotte Pommer remained the only anatomist who changed her career after encountering the bodies of Nazi victims and became a clinician. She joined the Nazi resistance fighters, was jailed but was able to escape.

After the war she briefly tried once more academic medicine, but then worked for the rest of her life in global non-government medical relief organizations.



# **Option 3**

# **Collaborative group reflection**

A wide-angle photograph of a beach at sunset. The sun is a bright orange orb on the horizon, casting a long, shimmering reflection across the water. The sky transitions from a deep orange near the horizon to a pale, clear blue at the top. The beach is dark and silty, with gentle waves lapping at the shore. In the foreground, a white wooden railing with square balusters runs across the bottom of the frame, suggesting the viewer is looking out from a balcony or walkway.

The Breath...Intention

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*We can best honor the victims of Nazi doctors by not only documenting the actions of those doctors, but by confronting the conditions of **malignant normality** that produced them.*

- Robert Lifton, 2017

Reflecting on the history of perpetrators as well as those who exhibited moral courage/resistors, how might you think about the moral courage you bring to inevitable moral challenges and complexities in the practice of medicine?

Within this, you may wish to consider clinical practice, research, public health policy, and healthcare leadership in general.

How might the history of medicine during the Holocaust inform your advocacy and activism as a healthcare practitioner and/or as a global citizen?

“Formative learning is about socializing students around values; its purpose is to produce professionals. Transformative learning is about developing leadership attributes; its purpose is to produce enlightened change agents.”

*(Frenk et al, 2010, Lancet, “Health professionals for a new century: transforming education to strengthen health systems in an interdependent world”)*

Reflect on the quote above and how this may resonate with you as a healthcare trainee or professional.

Medical students McDermott et al (2019, JGIM) encourage increasing recognition of a professional role identity as a “change agent” early in medical school. How might we support such initiatives in health professions education and practice?

How does the history of medicine during the Holocaust inform the discourse, moral courage, and ethical actions regarding contemporary medicine in domains such as:

- informed consent
- beginning or end of life issues
- potential abuse of power in the name of science for the public good
- power hierarchies in medical teams
- dual loyalties
- conflicts of interest
- influence of economic or political issues in our work
- challenge of genomics and technology expansion
- balance between societal needs and the rights of the individual
- balance between scientific advancement (research) and human dignity
- health inequities
- societal anti-racism and anti anti-Semitism efforts

How does this history inform our social contract with society or what has been termed a “covenant” with society?



# THANK YOU!

## References:

- Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet*. 2010; 376(9756): 1923-58.
- Hildebrandt, S. Books, bones and bodies: The relevance of the history of anatomy in Nazi Germany for medical education today. *Anat Rec* June 2. Online ahead of print.
- Holden M, Buck E, Clark M, Szauter K, Trumble J. Professional Identity Formation in Medical Education: The Convergence of Multiple Domains. *HEC Forum*. 2012; 24:245-255.
- Horton, R. Offline. Medicine and the Holocaust- it's time to teach. *Lancet*. 2020; 394(10193):105.
- Horton, R. Offline: Holocaust education: a medical imperative. *Lancet*. 2020; 396(10263):1619.
- Lifton, RJ. Malignant Normality. *Dissent*. Spring, 2017. <https://www.dissentmagazine.org/article/malignant-normality-doctors>
- Margalit, A. *The Ethics of Memory*. Cambridge, MA: Harvard University Press, 2004.
- McDermott C, Shank K, Shervinskie C, Gonzalo JD. Developing a Professional Identity as a Change Agent Early in Medicine School: the Students' Voice. *JGIM*. 2019; 34(5): 750-753.
- Reis S, Wald HS, Weindling P. The Holocaust, medicine and becoming a physician: the crucial role of education. *Isr J Health Policy Res*. 2019;8(1):55. <https://ijhpr.biomedcentral.com/articles/10.1186/s13584-019-0327-3>
- Roelcke V, Reis SP, Hildebrandt S. Announcing the *Lancet* Commission on Medicine and the Holocaust: Historical Evidence, Implications for Today, Teaching for Tomorrow. *Lancet*. 2021; 397(10277): 862-864.
- Wald HS. Professional identity (trans)formation: reflection, relationships, resilience. *Acad Med*. 2015; 90(6):701-6.
- Wald HS, Weiner CL. *Deadly Medicine: Creating the Master Race*. *Ars Medica*. 2009; 5(2): 48-57.

## Additional Resources from the “Legacy of Medicine” Seminar

### Related articles by Hedy Wald, PhD

Reis SP, Weindling P, Wald HS. [The Holocaust, medicine, and becoming a physician: the crucial role of education](#). Israel Journal of Health Policy Research. 2019; 8:55.

Wald HS, Weiner CL. [Deadly Medicine – Creating the Master Race](#). Ars Medica. 2009; 5(2): 48-78.

Kruse J, Wald HS. Legacy of the Role of Medicine and Nursing in the Holocaust: An Educational Intervention to Support Nursing Student Professional Identity Formation and Ethical Conduct. Nurs. Educ. Perspectives. 2022, in press.

Wald, HS. [Medicine and the Holocaust in Medical Education](#). reflectivemeded.

Wald, HS. Holocaust Legacy in Health Professions Education and Practice. [Korot: The Israel Journal of the History of Medicine and Science](#). Vol 25. (2019-2020). Ethics and the Health Professions: Education on the Holocaust and Healthcare.

Wald HS, Mandelbaum DE. [Holocaust and Medicine Legacy for Child Neurology Education and Practice: Contemporary Relevance of a Dark History](#). Ped. Neurology. 2021; 117: 27-28.

Wald, HS. [Professional Identity \(Trans\)Formation: Reflection, Relationship, Resilience](#). Acad Med. 2015; 90(6): 701-706.

Wald, HS. [In the Here and Now](#). JAMA. 2008; 299(6):613-614.

Wald HS, Monteverde S. [COVID-19 era healthcare ethics education: Cultivating educational and moral Resilience](#). Nursing Ethics. 2021; 29(1): 58-65.

Wald HS, Rubenfeld S, Fins JJ. [Holocaust as End Stage Disease: Medical Education as a Moral Imperative](#). Hektoen International.

## Bibliography, US History of race, racism, anatomy

Compiled by Sabine Hildebrandt, updated 2022

Araujo, Ana Lucia. 2021. [Slavery in the age of memory: engaging the past](#). London – Bloomsbury Academic

- Epilogue: the persistence of the Past, 181-4.
- Throughout: references to the Holocaust

Barbash, Ilisa; Rogers, Molly; Willis, Deborah. 2020. [To make their own way in the world: the enduring legacy of the Zealy Daguerreotypes](#). New York – aperture Peabody Museum Press

- Chapter 8: Sinha, Manisha: Of scientific racists and Black abolitionists: the forgotten debate over slavery and race

Berry, Daina Ramey. 2017. [The price for their pound of flesh: the value of the enslaved from womb to grave, in the building of a nation](#). Boston – Beacon Press.

- Chapter 6: Postmortem: death and ghost values, 148-193

Halperin, Edward C. 2007. "[The poor, the Black, and the marginalized as the source of cadavers in the United States anatomical education](#)." *Clinical Anatomy* 20, 489–495.

Henderson, Charlotte Yvette; Cardoso, Francisca Alves (eds.). 2018. [Identified skeletal collections: the testing ground of anthropology?](#) Oxford: Archaeopress

- Chapter 1: Henderson, Charlotte: Introduction. Pp1-10.
- Chapter 9: Watkins, Rachel J. The fate of anatomical collections in the US: bioanthropological investigations of structural violence. Pp169-186.
  - o P169: impact of structural inequalities [structural violence] on health, Farmer 2004; Bioanthropologists "frame the lived *and* post-mortem experience of individuals in US-based anatomical collections. This is because the acquisition, autopsy and dissection of individuals for teaching and research was informed by their locations on the social and economic margins of the societies in which they lived."

Kenny, Stephen:

- (2017) "'Specimens calculated to shock the soundest sleeper': deep layers of anatomical racism circulating on-board the Louisiana Health Exhibit Train," in Sokhieng Au, Raf de Bont and Kaat Wils, eds, [Bodies Beyond Borders: Moving Anatomies, 1750-1950](#). (Leuven: Leuven University Press, 2017).
- (2016) '[Medical racism's poison pen: the toxic world of Henry Ramsay](#),' Southern Quarterly [special double issue, 'Health in the South'], vol. 53, no.3 and 4, pp.70-96.
- (2015) '[Power, opportunism, racism: human experiments under American slavery](#),' Endeavour: A quarterly magazine reviewing the history and philosophy of science in the service of mankind.

Lusane, Clarence. 2002. [Hitler's Black Victims: The Historical Experiences of European Blacks, Africans, and African Americans in the Nazi Era](#). New York, London: Routledge.

Owens, Deidre Cooper. 2018 [paperback edition]. [Medical bondage: race, gender, and the origins of American gynecology](#). Athens – The University of Georgia Press

- Chapter 5: historical black superbodies and the medical gaze, 108-123

Redman, Samuel J. 2016. [Bone rooms: from scientific racism to human prehistory in museums](#). Cambridge – Harvard University Press.

- Whole book

Saini, Angela. 2019. [Superior – the return of race science](#). Boston: Beacon Press

- Chapter 5: Race Realists – making racism respectable again, pp71 ff

Savitt, Todd L. 1981 [first paperback edition]. [Medicine and slavery: the diseases and health care of blacks in antebellum Virginia](#). Urbana and Chicago – University of Illinois Press.

- Chapter 9: Blacks as medical specimens, 281-309; black bodies for research on the living and dead.

Savitt, Todd L. 2007. [Race and medicine in nineteenth- and early-twentieth-century America](#). Kent- Kent State University Press.

- Chapter 18: Abraham Flexner and the Black Medical Schools, 252-266. Before the Flexner report 1910, there were 7 black medical schools. Only Howard and Meharry “survived” Flexner, all others were closed by 1923, p.259.

Washington, Harriet A. 2006. [Medical apartheid: the dark history of medical experimentation on Black Americans from colonial times to the present](#). New York – Anchor Books

- Chapter 5: The restless dead: Anatomical dissection and display, 115-142

Wilder, Craig Steven. 2013. [Ebony & Ivy: Race, Slavery, and the Troubled History of America's Universities](#)

Wilkerson, Isabel. 2020. [Caste: the origins of our discontent](#). New York – Random House.

- Comparison of Nazi Germany, India caste system and US racism

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ANTHROPOLOGY**

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On the cover: Socially diverse multicultural and multiracial people on an isolated white background. Credit: vector\_s/Getty Images.