Editor's Comments

Journal of Biocommunication Special Issue on Legacies of Medicine in the Holocaust and the Pernkopf Atlas

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Welcome to the *Journal of Biocommunication's* Special Issue 45-1. We have designated this publication as a *JBC* "Special Issue," as it is devoted entirely to one topic. Before providing a summary about *JBC* 45-1, I want to include some historical background about our previous Special Issue publications.

The *Journal of Biocommunication* has published only three other Special Issues focused on a single topic. The first Special Issue, *JBC* 11-2, was published in May 1984. This issue was called *Computer Graphics in Biocommunication*, and it featured articles devoted to computer graphics, including hardware, software, and workflow. AMI member Herb Smith served as the *JBC* Guest Editor for this landmark publication.

The second Special Issue was *JBC* 19-3, published in September 1992. This issue was simply titled *Imaging*, and it included articles on the subjects of visualization, medical imaging databases, patient education, and the use of optical technology in patient simulators. Robin Sandefur was the *JBC* Guest Editor for this issue.

Our third Special Issue was *JBC* 36-1. It was called *Artist Rights* and was published in June 2010. That issue focused on aspects of artists' rights, and it broadly covered subjects of illustrators' rights, dating from the mid-1800s to the present. Included were articles that discussed issues surrounding existing US copyright law, copyright registration, preservation of artists' rights, and the current US Orphan Works legislation. Cynthia Turner and Brad Holland served as Guest Co-Editors for this issue.

Our current Special Issue (*JBC* 45-1) is called the *Journal of Biocommunication Special Issue on Legacies of Medicine in the Holocaust and the Pernkopf atlas*. It

represents our fourth Special Issue, and features 18 articles devoted to the controversies surrounding the Pernkopf atlas and its dark history. Our authors are recognized as renowned experts in this subject area. They offer their personal dialogues and perspectives about the atlas and the unspeakable horrors that occurred under the Nazi Regime. Leila Lax, Ph.D. has served as the *JBC* Guest Editor for this Special Issue. Dr. Lax is a recently retired Assistant Professor in the Master of Science program in Biomedical Communications, Institute of Medical Science, Temerty Faculty of Medicine, University of Toronto.

Introduction

Eduard Pernkopf was born in Rapottenstein, a small village in northeastern Austria. In 1907, he enrolled in the Vienna Medical School, where, in addition to his studies, he was active in a nationalistic German student fraternity. In 1920 Pernkopf became an assistant to Ferdinand Hochstetter, the director of one of the two Anatomy Institutes in Vienna. In that position, Pernkopf's duties included lecturing to first and second year medical students on the peripheral nervous and vascular systems (Williams, 2004).

In 1938 following the forced annexation of the Austrian nation into Nazi Germany (*Anschluss*), Pernkopf became dean of the Vienna Medical Faculty. All faculty were required to provide an oath of loyalty to Adolf Hitler, and by March 24, 1938, the minister responsible for the University of Vienna had ordered the Faculty to be "cleansed" of all Jews and other unwanted persons (Lehner, 1945). Within weeks of Pernkopf's appointment, 153 of 197 members of the medical faculty were dismissed for racial or political reasons. Pernkopf, an ardent Nazi, quickly rose through the academic ranks to become Rector

Magnificus, or president, of the University of Vienna in 1943.

Pernkopf undoubtedly was influenced by several anatomical atlas texts that preceded his own work. These included, Carl Toldt's *Anatomy for Students and Physicians* (Urban & Schwarzenberg, 1896 - 1900), Carl Heitzmann's *Atlas of Descriptive Anatomy of Man* (Wilhelm Braumüller, 1902 - 1905), Karl Werner Spalteholz's *Handatlas of the Anatomy of Man* (S. Hirzel Verlag 1895 - 1903), and Johannes Sobotta's *Atlas of Descriptive Anatomy of Man* (J.F. Lehmanns Verlag, 1905) (Williams, 2004).

Figure 1. Illustration by Erich Lepier (*Anterior Projection of Normal Viscera*) used for the Pernkopf atlas, as well as Sobotta's *Atlas of Descriptive Anatomy of Man*. Note the publishers' yellow labels indicating the intended dual use of the illustration. Pernkopf's *Atlas of Topographical and Applied Human Anatomy, Second Edition*, page 228, figure 225, Urban & Schwarzenberg 1980. Permission provided by the Josephinum – Ethics, Collections and History of Medicine, MedUni Vienna. Image credit: Medical University of Vienna, MUW-ZE-003250-0005-0156r.

Erich Lepier (1898-1974), who was the first artist to prepare illustrations for Pernkopf's *Topographische Anatomie des Menschen*, also had created illustrations for the Sobotta atlas (Figure 1).

Historical Background of the Atlas

Many of the authors featured in this *Journal* have provided evidence-based historical contributions regarding the Pernkopf's atlas' dark history. These articles, published from 1988 through 2021, represent a continuous academic dialogue that has evolved over time, and they are centrally important to our discussion of this subject.

A certain chronology of events followed Drs. Howard Israel's and William Seidelman's 1996 *Letter to the Editor* published in *JAMA*, as these physicians attempted to determine the provenance of specimens that may have been used as references for the Pernkopf atlas (Seidelman, personal communication, 2021). Their *Letter to the Editor* ultimately led to the "Senate Project of the University of Vienna for Investigations of Anatomical Science in Vienna, 1938-1945" (Israel, Seidelman, 1996).

In 2000, Dr. Daniela Angetter published an important contribution in *Lancet*, based on the findings of the "Senate Project," for which she was the principal researcher under the Project Chair, Dr. Gustav Spann. In her article Angetter confirms that 1377 bodies of executed citizens, including eight of Jewish origin, were assigned to the Department of Anatomy of the University of Vienna. One body of Jewish descent was returned to family members, either following the execution, or after the body had arrived at the Department of Anatomy. Angetter continues, "Most of the 1377 executed people were guillotined by the Vienna assize court; some of them were shot by the Gestapo." Many of these were executed for their political views or for participating in various acts of resistance. However, with the possible exception of the eight executed Jewish victims referred to earlier, the Senate Project's commission found no evidence that the Pernkopf illustrations were based on Jewish anatomical specimens" (Angetter, 2000).

We recognize that some level of uncertainty may exist regarding the provenance of subjects portrayed in the atlas, due to the destruction of specimens and records from the 1945 allied bombing of the Anatomical Institute. As outlined in Dr. Seidelman's 2012 *Annals of Anatomy* article, this uncertainty is accentuated by the lack of veracity in the responses from university faculty, who had been asked to respond to questions raised by Yad Vashem

(The Holocaust Martyrs' and Heroes' Remembrance Authority) (Seidelman, personal communication, 2021).

While the publishing of the Pernkopf atlas ceased in 1994, existing editions of the atlas still remains in use and are available through online retailers (Czech, et al. 2021).

The Pernkopf atlas, with over 800 detailed paintings of anatomical dissections, is considered by some to be the finest, most comprehensive anatomical atlas ever created. Many anatomists, surgeons, students of allied-health, medical illustrators, and medical photographers still use the Pernkopf atlas as a trusted anatomical reference. Richard Snell, MD, PhD, described the atlas in a 1990 *New England Journal of Medicine* book review, "This outstanding book should be of great value to anatomists and surgeons. It is in a class of its own and will continue to be valued as a reference..." (Snell, 1990).

Anne Agur, PhD, is a Professor in the Division of Anatomy, Department of Surgery, Temerty Faculty of Medicine, University of Toronto. Dr. Agur also is the co-author of *Grant's Atlas of Anatomy, Essential Clinical Anatomy, and Clinically Oriented Anatomy*. Regarding the Pernkopf atlas she notes, "the level of high fidelity and anatomical structural detail seen in the Pernkopf atlas is not present in other references, including surgical anatomy atlases and books." Dr. Agur continues, "this atlas could play a significant role in educating future clinicians and surgeons and provide answers to anatomically related quandaries" (Agur, 2021).

Susan Mackinnon, MD, FRCS(C), FACS, was the Sydney M., Jr. and Robert H. Shoenberg Professor, and was the Chief, Division of Plastic and Reconstructive Surgery, Washington University, St. Louis, Missouri from 1996-2020. She currently holds the Minot Packer Fryer Chair of Plastic Surgery. Dr. Mackinnon uses the Pernkopf atlas in her surgical planning and patient education, but she offers full disclosure about the origins of the atlas to her patients, surgical trainees, and her students (Mackinnon, 2021).

Others are reminded of the troubling dark side of the atlas, specifically that of Pernkopf's association with the Nazi Party, which he had joined in 1933. Eduard Pernkopf became one of the Nazi elite, and his lectures at that time reflected his belief in the genetic inferiority of his Jewish faculty members (Lehner, 1990).

As you will learn from these articles, Pernkopf's talented Viennese artists also had Nazi affiliations. They expressed their own political ideology in some of their illustrations, evidenced by the inclusion of the *Hakenkruz* (swastika),

or the *Schutzstaffel* (SS rune), incorporated within the artists' own signatures. These incriminating Nazi symbols appeared in the original German edition of the atlas, persisted through the 1964 English 2-volume edition of the atlas, but later were removed (scratched out) for subsequent editions (Bagatur, 2018) (Hildebrandt, 2021).

Prof. William Seidelman adds:

The evidence of Nazi atrocities can speak for itself; like the paintings from the Pernkopf atlas with signatures with the swastikas (Hildebrandt, 2021), or the drawings of the headless bodies stacked in the storage area of the anatomy institute (Hildebrandt, 2021), or the anatomical records that show the lists of names of people, who had been decapitated on a Gestapo guillotine. The evidence speaks for itself (Seidelman, 2021).

Previously Published Articles

In order to provide a more thorough overview, the first section our Special Issue includes six previously published articles (with extensive reference lists) all related to the Pernkopf atlas, the artists/illustrators, and the ethical use of the atlas in medical education. This selection of historical papers are by distinguished authors David J. Williams, M.A., Daniela C. Angetter, M.D., William E. Seidelman, M.D., Sabine Hildebrandt, M.D., Andrew Yee, Ph.D. et al., and Rabbi Joseph A. Polak. These powerful articles provide an important historical framework for this issue. The following is short synopsis of each of these contributions.

We include the *The History of Eduard Pernkopf's Topographische Anatomie des Menschen*, authored by medical illustrator and historian, Prof. Emeritus David Williams at Purdue University. This 1988 article first appeared in the *Journal of Biocommunication* over 30 years ago. The article was written following Professor William's academic sabbatical in Munich and Innsbruck, where he had studied the original Pernkopf paintings at the offices of Urban & Schwarzenberg's, and then studied (and painted) with Franz Batke at the Anatomy Institute in Innsbruck. At the time of Professor Williams' sabbatical, Batke was the only living Pernkopf artist. Williams' article is a detailed study of the history of the atlas and the artists, who created the illustrations. Professor Williams has kindly allowed us to republish this seminal article in its entirety (Williams, 1988).

We also include a previously published article by William Seidelman, M.D., from the *Annals of Anatomy*, titled

Dissecting the History of Anatomy in the Third Reich - 1989-2010: A Personal Account. This 2012 paper is a personal narrative of the author's involvement with revelations regarding use of anatomical specimens obtained from victims of Nazi terror. The article documents the responses to questions regarding the retention and use of anatomical and pathological specimens from victims of Nazi terror by leading academic and scientific institutions and other organizations in Germany and Austria (Seidelman, 2012).

Sabine Hildebrandt, M.D.'s article is an excerpt from her landmark book from Berghahn Books, *The Anatomy of Murder: Ethical Transgressions and Anatomical Science during the Third Reich*. This is the first and only comprehensive textbook written on the history of anatomy during the Third Reich. We include an excerpted portion from her book called, "*The Pernkopf Controversy*." Dr. Hildebrandt concludes, "it seems justifiable to continue using Pernkopf's book under the condition that information on its historic background is made available at the time of use. To see the atlas as a masterwork of greatest aesthetic value, or as the evil manifestation of NS science, seems to ascribe this book too much power. The atlas is neither of these things, but the product of an obsessive perfectionist, who would have pursued his work under any political circumstances" (Hildebrandt, 2016).

Andrew Yee, Ph.D., his co-authors, and the journal *Neurosurgery*, have allowed us to republish, *Nerve Surgeons' Assessment of the Role of Eduard Pernkopf's Atlas of Topographic and Applied Human Anatomy in Surgical Practice*, appearing in *Neurosurgery* in 2019. Susan Mackinnon, M.D., the Minot Packer Fryer Chair of Plastic Surgery at Washington University, had initiated this investigative study, when she initially discovered the dark history of the atlas that she had been using for years in surgery, with her students, her residents, and her patients. These authors investigated the role of Pernkopf's atlas in a nerve surgeons' current medical practice, and wished to determine whether a proposal for its ethical handling could provide possible guidance for the atlas' continued use in surgery and surgical education (Yee, et al., 2019).

We include, *Anatomical Science at University of Vienna 1938-45* by Daniela Angetter, Ph.D., published in *Lancet* in 2000. Dr. Angetter states, "For the past 15 years, American medical professors have voiced misgivings over the possible misuse of bodies of Holocaust victims for the illustrations in this world-famous anatomical atlas, *Topographical Human Anatomy* by Eduard Pernkopf." Dr.

Aggetter continues, "Critics have suggested that it is reasonable to assume that Eduard Pernkopf, an enthusiastic supporter of Nazi policies, used bodies of those executed at the Vienna Landesgericht (assize court) in the preparation of his atlas illustrations." Dr Angetter provides definitive answers to some of the most relevant questions about the origin of bodies that may have served as references for the atlas (Angetter, 2000).

Of particular interest is Rabbi Joseph A. Polak's, *How to Deal with Holocaust Era Human Remains: Recommendations Arising from a Special Symposium 'Vienna Protocol' for when Jewish or Possibly-Jewish Human Remains are Discovered*. Rabbi Joseph Polak is Rabbi Emeritus of Hillel House at Boston University, and is Chief Justice (Rosh Dayan) of the Rabbinical Council of the Commonwealth of Massachusetts and New England. Rabbi Polak was assisted in developing *The Vienna Protocol* by Prof. Michael A. Grodin, M.D., Professor of Health Law, Ethics and Human Rights, Boston University. In addition, Dr. Grodin is Director of the Project on Ethics and the Holocaust at the Elie Wiesel Center for Judaic Studies. Editors of *The Vienna Protocol* included William Seidelman, M.D., Lilka Elbaum, and Sabine Hildebrandt, M.D. A report within *The Vienna Protocol* document called, "*Report on How to Deal with Human Remains.....*" was the outcome of a special symposium held at Yad Vashem in May, 2017. Rabbi Joseph Polak, a child survivor of the Holocaust, proposes ethical and procedural guidelines on how to handle the discovery of human remains related to the Holocaust (Polak, et al., 2017). *The Vienna Protocol* not only addresses the final disposition of human remains, but it also addresses the ethical question of using images from the Pernkopf atlas. *The Vienna Protocol* is a powerful pronouncement that we are proud to include in this Special Issue.

Presentations from the Symposium: *The Vienna Protocol: Medicine's Confrontation with Continuing Legacies of its Nazi Past*

The second section of our Special Issue features seven more recent articles and commentary from some of the world's leading historians and authorities on the subject of the Pernkopf atlas and the abuses of Nazi medicine. These authors presented papers at a Holocaust Education Week Symposium that was held on Nov. 10, 2019, at the Temerty Faculty of Medicine, University of Toronto, Toronto, Canada. This landmark Symposium was called,

"The Vienna Protocol: Medicine's Confrontation with Continuing Legacies of its Nazi Past" (Lax, 2019).

The Toronto Symposium faculty included Susan Mackinnon, M.D., Rabbi Joseph Polak, William E. Seidelman, M.D., Sabine Hildebrandt, M.D., Philip Berger, M.D., Anne Agur, Ph.D., and Leila Lax, Ph.D., who also served as the Symposium coordinator and host. (Please see Dr. Lax's Guest Editor's Remarks for detailed information about each of these Symposium authors.)

Susan Mackinnon, M.D., and Andrew Yee, Ph.D. co-author the article, *"Before and After I Knew: Disclosure, Respect, Gratitude, and Solemnity."* Susan Mackinnon, M.D., FRCS(C), FACS, currently holds the Minot Packer Fryer Chair of Plastic Surgery at Washington University in St. Louis, Missouri. Dr. Mackinnon's article chronicles her own personal and professional journey, as she recalls the events surrounding her discovery of the atlas' disturbing history. While offering full disclosure about the origins of the atlas to her patients, surgical trainees, and her students, she hopes for better ways to access the material in the Pernkopf atlas in order to help her patients understand the need for ethical disclosure, respect, gratitude, and solemnity (Mackinnon, 2021).

Rabbi Joseph Polak, Chief Justice (Rosh Dayan) of the Rabbinical Council of the Commonwealth of Massachusetts and New England, contributes an article based on his Toronto Symposium presentation called, *"The Vienna Protocol and Reflections on Nazi Medicine: Murder à la Carte."* Rabbi Polak states that Hitler and other Nazi elite felt entitled to live outside of morality, becoming like the artists and poets of the Romantic Period, "who felt that they occupied a higher sphere, not answerable and not accountable to anyone." He further states that like the artist, "who murders, but does not do so with his own hand, the physician supervises executions and unspeakable experiments." Rabbi Polak continues, "Anatomists buttressed their own collections at a number of German and Austrian universities, by placing orders from bodies found among the executed or the about-to-be executed" (Polak, 2021).

We also include a powerful article from Prof.(Em) William Seidelman, M.D., Department of Family and Community Medicine, Temerty Faculty of Medicine, University Toronto. Dr. Seidelman's article, *"The Role of German Academic Medicine and Science in the Medical Crimes of the Third Reich and the Shoah: The Continuing Legacy,"* is an authoritative and comprehensive analysis of the significant role played by the German and Austrian medical profession during the Nazi period and the Shoah.

Regarding Nazi medicine's role, Dr. Seidelman concludes, "74 years after the end of the war and the Shoah, we are only at the beginning of any understanding of what happened within the walls of those once esteemed institutions and organizations" (Seidelman, 2021).

We include Sabine Hildebrandt, M.D.'s important Toronto Symposium article, *"Anatomy in Nazi Germany: The Use of Victims' Bodies in Academia and Present-Day Legacies."* Dr. Hildebrandt is an Associate Professor of Pediatrics in the Department of Pediatrics at Boston Children's Hospital, and a lecturer on Global Health and Social Medicine at Harvard Medical School. In her article Dr. Hildebrandt summarizes that, "Anatomists used the bodies of victims of the National Socialist regime in education and research, committing ethical transgressions that included a paradigm shift from work with the dead, to work with the 'future dead.' The victims' remains were buried in unmarked graves, or 'lost' in university anatomical collections, without names" (Hildebrandt, 2021).

We also include Philip Berger, M.D.'s Toronto Symposium paper, *"Canadian Physicians' Breach of Duty to Patients and Communities from the Acquisition of Indigenous Skulls in the 19th Century to the Abandonment of People with AIDS in the 20th Century."* Dr. Philip Berger is an Associate Professor at the University of Toronto. He was Medical Director of the Inner City Health Program at St. Michael's Hospital, Toronto from 1997-2017 and former Chief of the Department of Family and Community Medicine from 1997 to 2013. Dr. Berger discusses how *The Vienna Protocol* transcends the world of Jewish law and provides broad ethical considerations for modern medicine. In his article Dr. Berger provides examples demonstrating how certain events in Canadian medical history have intersected with *The Vienna Protocol*, and why historical insight remains relevant today (Berger, 2021).

Anne Agur, Ph.D.'s, Symposium article, *"Anatomical Detail and Accuracy of the Pernkopf Atlas and Examples of Clinical Impact,"* offers an anatomist's perspective about the Pernkopf atlas. Dr. Agur is a Professor in the Division of Anatomy, Department of Surgery, Temerty Faculty of Medicine, University of Toronto. Dr. Agur also is the co-author of *Grant's Atlas of Anatomy, Essential Clinical Anatomy, and Clinically Oriented Anatomy*. In her article, Dr. Agur notes that the fidelity of anatomical detail seen in the Pernkopf atlas remains unmatched in other references, including surgical anatomy atlases. She provides examples of serial dissection illustrations from the Pernkopf atlas in order to answer an anatomically-

based clinical question relating to targeted nerve ablation (radio-frequency) procedures (Agur, 2021).

Leila Lax, B.A., B.Sc.A.A.M., M.Ed., Ph.D. an Assistant Professor (retired) in the Master of Science program in Biomedical Communications, Institute of Medical Science, Temerty Faculty of Medicine, University of Toronto. Her article, *"Towards Informed Use of the Pernkopf Atlas,"* provides an important discussion about the inherent ethical dilemmas relating to the use of the Pernkopf atlas, from the perspective of a medical artist. She indicates that informed use, established as an ethical standard, "needs to be integrated both in academia and in practice." Dr. Lax in her Symposium presentation, echoed Prof. William Seidelman's 1995 request, and highlighted the necessary updating of the 1997 letter of Information for the Users of the Pernkopf Atlas from the University of Vienna. This echo was heard by the Medical University of Vienna and a new Note to Users of Pernkopf's Atlas was created and is published in this Special Issue. Dr. Lax concludes, "Through informed use we memorialize and pay tribute to the Nazi victims portrayed in the atlas" (Lax, 2021).

Important Contributions from the Medical University of Vienna

The third section of our Special Issue's Table of Contents includes invited commentary and contributions from distinguished faculty at the Medical University of Vienna. These authors include Christiane Druml, LL.D. Since 2016 she holds the UNESCO Chair on Bioethics at the Medical University of Vienna, and she also serves as Director of Ethics, Collections and History of Medicine of the Medical University of Vienna. Dr. Druml's article, *"Commemorative Lecture on the Occasion of Medical University of Vienna's 'Dies Academicus' and Announcement of Elsevier's Donation of the Pernkopf Atlas Anatomical Illustrations to the Josephinum"* has been translated and edited from her March 12, 2021 lecture.

Herwig Czech, M.A., Ph.D., is Professor and Chair, History of Medicine at the Medical University of Vienna, Department of Ethics, Collections and History of Medicine (Josephinum). He co-directs the research project "Brain research at institutes of the Kaiser Wilhelm Society in the context of National Socialist crimes," funded by the Max Planck Society. We include his article, *"What Should Be Done with Pernkopf's Anatomical Illustrations? A Commentary from the Medical University of Vienna."* Wolfgang J. Weninger, M.D., is Speaker of the Medical Imaging Cluster. His research focuses on clinically applied

anatomy, developmental biology, and multimodal imaging. Dr. Weninger was also a co-author in the above-mentioned article.

Univ. Prof. Dr. Markus Müller is Rector of the Medical University of Vienna, and he is a Professor of Internal Medicine and Clinical Pharmacology. We include this co-authored document, *"Note to the Users of Pernkopf's Atlas of Topographical and Applied Human Anatomy"* (Müller, Druml, 2021).

Drs. Müller and Druml, along with the editors of the *Journal of Biocommunication*, ask that the document, *"Note to the Users of Pernkopf's Atlas of Topographical and Applied Human Anatomy,"* be read in its entirety. All users of Pernkopf's atlas are requested to print the linked PDF found on the Special Issue's Table of Contents, and insert this *"Note"* in all volumes of the atlas.

Acknowledgement

Our *JBC* Guest Editor, Dr. Leila Lax, is a *JBC* Literary Award winning author and a former faculty member of Biomedical Communications, Temerty Faculty of Medicine, University of Toronto. She is to be commended for her leadership and commitment for coordinating the Toronto Pernkopf Symposium and for further expanding the dialogue through this *JBC* Special Issue. Following the Symposium, Leila proposed the creation of a collection of online resources to improve awareness within the field of biomedical visualization and to be used in other contexts for Holocaust education. This *JBC* Special Issue began with a simple email from Leila, inquiring about the possibility of including the "proceedings" and video content of the Symposium in the *JBC*. Our Special Issue was an outgrowth of those discussions, and this Special Issue would not have been possible without Leila's dedication and professionalism. I personally want to thank her, and each one of our authors for their important contributions to historical scholarship.

I also want to thank Prof. Emeritus David Williams, who perhaps single-handedly revealed both the beauty and controversy of the Pernkopf atlas to the world with his 1988 *Journal of Biocommunication* article. Professor Williams' sabbatical work in 1980, while in Munich with Urban & Schwarzenberg and in Innsbruck studying with Franz Batke, has provided us with much insight into the Pernkopf atlas and its controversy. Professor Williams' biographies of each of the Pernkopf artists are detailed, and they significantly add to what we now know about the

atlas and this group of artists. Had Professor Williams not chronicled his sabbatical in his original Pernkopf manuscript, this information might otherwise have been lost to history. It is noteworthy that Prof. Williams' entire Eduard Pernkopf archive was recently gifted to the Josephinum in Vienna. Regarding this donation, Prof. Williams writes, "It is in a good place, where it belongs, alongside the remaining Pernkopf paintings" (Williams, personal communication, 2021).

Additionally, I want to thank the members and advisors of our Journal Management Board, who embraced of the concept of the Special Issue, and have contributed to the editorial process. I want to thank April Ingram (*JBC* Managing Editor), Carol Gray (*JBC* Business Manager), and Tonya Hines (*JBC* Advisor) for their advice and for their assistance with editing, proofing, and obtaining appropriate licensing for certain images found within this issue.

Finally, I wish to acknowledge and thank my wife, Mary Katherine Schnitz, who supported me during these many months that were devoted to this Special Issue.

An Ongoing Dialogue

The *Journal of Biocommunication* is proud to serve as a scholarly platform for this important dialogue. The debate about the ethical use of the Pernkopf atlas will certainly continue, as more is discovered about Pernkopf's connection to the Nazi Regime. As you read these articles, you will have unresolved feelings and questions about when it may be acceptable to use the atlas, knowing that its creation is rooted in Nazi medicine.

How does one reconcile the beauty of the illustrations and the utility of the Pernkopf atlas with the morally repulsive, evil nature of the National Socialist regime that helped create it? The simple answer is, "You cannot." This, and other, haunting ethical questions can only be addressed with an ongoing dialogue about the creation of the atlas and its continued use in medical education. Our Special Issue is proud to be a part of this discussion. We hope that this Special Issue not only will add to the existing dialogue, but also that it will generate new ethical discussions about the use of the Pernkopf atlas.

Conclusion

The Nazi era was an evil time - a broken time. Anti-Semitism, bigotry, political terror, and genocide were commonplace under the National Socialist regime. William Seidelman, M.D. offers the following:

"The atrocities carried out under the Third Reich were part of a state-sponsored health policy, including programs of mass murder, based on government approved racial biology. These policies were reinforced by the academic and scientific elite, within the state policy of "volksgesundheit," or public health, calling for the elimination of "useless eaters" and "lives without value." (Seidelman, 2021).

This Special Issue will be unsettling for some readers, who until this time, may not have been aware of the dark history of Pernkopf's *Atlas of Topographical and Applied Human Anatomy*. Our Special Issue authors engage us with an important historical narrative, and they present their personal dialogues and perspectives about the unspeakable horrors that occurred under the Nazi Regime.

These articles will touch our souls, and they remind us of the worth of all people, including those with differences of race, culture, religion, class, position, gender, and sexual orientation. The *JBC* Management Board and editors encourage all readers to exclude no one, hurt no one, hate no one.

We respectively dedicate this Special Issue to the memory of those countless lives lost to Nazi terror.

Gary W. Schnitz, Editor-in-Chief
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The *Journal of Biocommunication* wishes to thank the Josephinum and the Medical University of Vienna for approving the publication of Pernkopf atlas images that are used within this Special Issue. These images may appear on the cover, in the Table of Contents, and as figures within articles and are acknowledged with the following image credit:

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