Why Did Osler Not Perform Autopsies at Johns Hopkins?

To the Editor.—Lucey and Hutchins[1] investigate whether Sir William Osler, who performed almost 1000 autopsies during his career, performed even a single autopsy while at Johns Hopkins. Their article focuses on a patient with bilateral congenital cystic kidney disease and then quibbles with Bliss's biography as to whether the autopsy was performed by Osler (ie, as the ''prosector'') or whether Osler merely assisted William MacCallum, a Hopkins pathologist. Although it is admirable that the authors were able to identify the case in question within the records of the autopsy service at the Johns Hopkins Hospital and build a case for Osler being at the autopsy table as an assistant, the article does not address the more interesting question of why Osler never functioned as an independent autopsy pathologist at Hopkins.

Osler was recruited to Hopkins from Philadelphia, where he was a professor of medicine at the University of Pennsylvania and a ''visiting physician'' at Blockley Hospital, an almshouse for treating indigent patients. It was at Blockley that Osler performed his 162 Philadelphia autopsies, and it is well documented that Osler and his residents played very loosely with institutional autopsy consent regulations, that Osler was constantly in trouble with Blockley administration because of this, and that Osler totally ignored the authority of Blockley's 2 staff autopsy pathologists, E. O. Shakespeare and H. F. Formad. According to Bliss, ''Complaints about post-mortem abuses reached the Blockley trustees, both from the public and from the pathologists whom Osler and his acolytes tended to ignore. . . . Blockley gradually tightened its procedures to rein in Osler and his residents.''[2] During Osler's 4 years at Blockley, the autopsy consent procedures were adjusted several times to regulate or prohibit performance of autopsies by ''visiting physicians.''[3,4]

According to Henry Ware Cattell, a pathologist at the University of Pennsylvania and Blockley in the 1890s, the custom at Blockley, even though it was not strictly legal, had been to permit postmortem examinations on ''all persons dying in charitable institutions'' and that ''this custom prevailed . . . with practically no opposition, until lawsuits, arising out of this custom, caused it to be discontinued.''[5] Essentially, Blockley was the Wild West on the North American autopsy frontier, and Osler and his deputies succeeded in stretching the limits even there.

In stark contrast, Hopkins was not a charitable institution specializing in indigent patients, and William Henry Welch was not a pathologist who could be ignored. Welch was not only the founding physician at Hopkins; he was responsible for hiring Osler. It seems inconceivable that Welch, at the time of Osler's hiring, was not fully aware of these issues in Philadelphia. Undoubtedly, Welch made it clear that the autopsy room at Hopkins belonged to Welch and that Osler would be a welcome guest, but that he was not going to be doing autopsies on his own and duplicating his Philadelphia behaviors at Hopkins. Osler clearly played by ''the rules'' while he was in Baltimore, and this fact is reinforced by the article by Lucey and Hutchins.[1]

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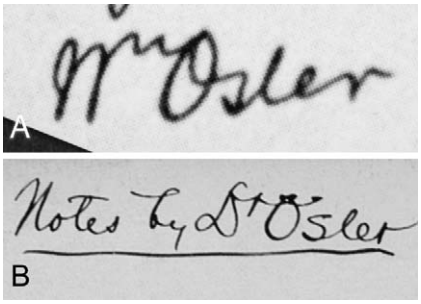
The author has no relevant financial interest in the products or companies described in this article.

In Reply.—As we noted in our article,[1] Harvey Cushing wrote that Sir William Osler gave up ''without question'' autopsy work at Johns Hopkins after assuming the position of professor of medicine.[2] We hypothesized that Dr Osler asked permission of Dr Welch to participate in the autopsy we described. Dr Wright makes an excellent point in detailing how Osler and Welch may have come to an understanding regarding postmortems before Osler joined the hospital staff. Certainly, this would explain Dr Cushing's comment, as Osler would have agreed to not pursue autopsy work if he wanted to work at Johns Hopkins.

Shortly after receiving notification of Dr Wright's letter, we received correspondence regarding the use of handwriting analysis to resolve whether or not Dr Osler wrote the autopsy report from our article (J. S. Krauss, MD, e-mail communication, February 23, 2008). Many examples of Osler's handwriting are available in the archives at Johns Hopkins, and contemporary examples of his handwriting were compared with the autopsy report from case 1498. Based on samples from Osler's papers, his signature is remarkably consistent during a period of 27 years (1892–1919), even to the untrained eye.[3] The results of this analysis demonstrate that William Osler did not write any of the autopsy notes for this case.[4] Figure 1, A, shows an example of handwriting known to be from William Osler, and Figure 1, B, shows an example of handwriting from the au-



A, Signature of Sir William Osler (courtesy of the Alan Mason Chesney Medical Archives of the Johns Hopkins Medical Institutions, Baltimore, Md). B, Sample of writing from the autopsy report 1498 (Department of Pathology, Johns Hopkins Medical Institutions, Baltimore, Md).

topsy report. We continue to postulate that Dr Osler dictated part of the report while participating in the dissection.

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Call for Revision of College of American Pathologists–Mandated Requirements for Retention of Laboratory Records and Materials

To the Editor.—The existing requirement by the College of American Pathologists (CAP) mandating laboratories to retain pathology reports, slides, and paraffin-embedded tissue blocks for a minimum of 10 years is outmoded.[1] This is also true for many state regulations governing this matter. The indefinite retention of tissue from patients is standard at many major academic institutions, but this is not the case at many hospitals and laboratories. In the present era of significant advances in the management of certain cancer types, this recommended timeframe falls short of the survival some patients enjoy.

Having a relatively short retention time for laboratory records and material is impacting patient enrollment on clinical trials. We have noted that some patients who relapse several years after initial diagnosis are being denied enrollment in clinical trials because their initial pathology was unobtainable from the hospital where the initial surgery was performed. In fact, in 1 clinical trial that is currently open at our institution, several patients were not eligible for enrollment solely because their initial diagnostic material had been discarded. The trial is a phase I vaccine study that requires the patient to be positive for HLA-A2 and the tumor to express prostate-specific membrane antigen, preferentially expressed antigen on melanomas, and β_2-microglobulin. There are no restrictions with regard to the type of cancer. To date, 40 patients have consented to be screened for the trial, of which 28 patients had a diagnosis of prostate cancer. Five of the prostate cancer patients were denied enrollment in this trial because pathology material could not be obtained from the corresponding original pathology facilities, which stated to our clinical trials office that the materials were discarded in view of the length of time that had elapsed since diagnosis (Table). On the basis of these data showing that all 5 prostate cancer patients who could not enter the trial had been diagnosed more than 10 years prior to consideration of entry in the trial, that the median survival after diagnosis of localized prostate cancer is more than 15 years, that in many cases the only tissue ever available for prostate cancer patients is the original biopsy, and that valuable genetic and pathologic data are available only from such tissue, we recommend that tissue blocks on cancer patients be maintained longer than currently mandated.

Summary of the Time Intervals Between Diagnosis and Enrollment in Phase I Vaccine Study

Patient	Interval, y
1	14
2	12
3	15
4	12
5	15

We suggest that there be a major revision of the CAP-mandated requirements for retention of laboratory records and materials both to increase the retention time and to institute mechanisms by which patients are involved in the decision to discard their material. We propose changing the mandated requirement to retain tissue from 10 years to at least 20 years, applicable at a minimum to all diagnostic material on patients with cancer. Thereafter, if the cost of increased retention times is a major concern at a particular facility, there should be an effort to find the patient and ask whether he or she would like to assume ownership of the material so that the patient can provide the specimens if they are subsequently needed. This is particularly important as predictive biomarkers are developed for personalized medicine.

The call for change in the requirements for retention of records and materials should be endorsed by the professional organizations including the CAP and should be endorsed by state legislation. We hope that this communication will serve as an impetus to initiate the needed changes.

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1. College of American Pathologists Laboratory Accreditation Program Inspection Checklists. Available at: www.cap.org. Accessed May 13, 2008.

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In Reply.—Drs Khoury, Vogelzang, and Fink state that the College of American Pathologists 10-year retention period for tissue (presumably paraffin blocks) is insufficient and propose changing it to 20 years. Although the current retention period is already much longer than the 2 years required by the Clinical Laboratory Improvement Amendments of 1988 (42 CFR 493.1105), the authors argue that this is still ''relatively short'' and that patients would benefit from a longer period. Institutions can always choose to keep blocks longer than the minimum retention period, but before the College can mandate a longer period for all laboratories, the value of that change must be balanced with the added burden it represents.

The authors base their proposal on 5 patients who were ineligible for a small phase I trial because their blocks were no longer available. As most clinical trials enroll patients within 10 years of diagnosis, this situation would seem to be very uncommon. Changing the retention period to 20 years on this basis would result in a substantial incremental increase in the cost of storage for all laboratories that would likely benefit only a few patients.

The authors do not address the issue of storage conditions, but the quality of paraffin-embedded material stored under routine conditions for more than 10 years is often unknown. The quality of RNA, for instance, has been shown to decrease significantly after 10 years.[1] If prolonged storage of paraffin blocks reduces their value for some types of testing, the relative benefit of this proposed change is diminished even further.

Anticipating objections to a blanket requirement to store all blocks for 20 years, the authors offer 2 alternatives, neither of which is realistic. The first—a separate 20-year storage interval for cancer cases—is impractical. Busy histology laboratories must have an efficient daily work flow process to ensure that patient care needs are met and that errors are avoided. Having to establish a process to sort through and segregate blocks sometime after the pathologist has determined which ones contain cancer would be an enormous (and new) burden on histology laboratories. The second alternative—requiring institutions to locate every patient after 10 years and involve them in the decision to discard their material—is simply not credible.

Before mandating changes as significant as the ones proposed, a much clearer demonstration of value is needed. If, as seems most likely, very few patients would benefit from the proposed change, the substantial increase in resources needed would merely represent another unfunded mandate for laboratories without sufficient justification.

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The author has no relevant financial interest in the products or companies described in this article.

The Pathology of Pulmonary Disorders Due to *Aspergillus* spp

To the Editor.—We are writing to alert you to a potential problem with regard to the use of some photomicrographs from our book in an article published in the April issue of *Archives of Pathology & Laboratory Medicine.* The article in question is that authored by Richard L. Kradin, MD, and Eugene J. Mark, MD, entitled ''The Pathology of Pulmonary Disorders Due to *Aspergillus* spp.''[1] It appears that 7 of the figures published in that article were taken from our atlas entitled *Pathologic Diagnosis of Fungal Infections* published through the ASCP Press.[2] The figures in their article and the corresponding figures from our book are detailed in the following table.

Summary of Figures

Their Figure No.[1]	Our Figure No.[2]
2	66
4	71
5	80
9	88
10	89
15	106
16	94

Furthermore, the legend for their Figure 15 indicates that photomicrograph as representative of acute pneumonia in a patient with invasive aspergillosis. This is identical to our Figure 106, the legend for which clearly states that this is a case of invasive pulmonary pseudallescheriasis. Therefore, it seems that the content of the picture has been misrepresented.

We have spoken with the director of the ASCP Press, Mr Bart Wacek, who has confirmed that no request was made, nor permission given to, the authors of the journal article to use our copyrighted photomicrographs. Furthermore, the authors of the journal article do not attribute the source of the pictures anywhere in their article. The reader is left to presume that the authors of the journal article own these figures and, together with the ARCHIVES, have copyrighted them.

We are hopeful that the authors of the article will be able to explain how this situation happened.

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In Reply.—It has come to the attention of Dr Mark and myself that our recent review article ''The Pathology of Pulmonary Disorders Due to *Aspergillus* spp'' contains several photomicrographs that were originally published in the excellent 1987 text *Pathologic Diagnosis of Fungal Infections,* authored by Drs Chandler and Watts, and that Figure 15 thought to represent pneumonia due to angioinvasive *Aspergillus* spp in fact represents a *Pseudoallescheria* infection.[1,2]

As primary author of the article, I was solely responsible for selecting the photomicrographs for the article. All the figures in the article were chosen from my digital teaching file labeled ''Aspergillus.'' At the time of preparing the manuscript, I believed that all of the images were derived from cases collected during the years by colleagues, residents, and myself, at my hospital, as they were not labeled as potentially being from another source.

After years of collecting photomicrographs, I confess that I am not always certain as to their provenance. However, this does not excuse my error. I apologize to Drs Watts and Chandler and to your readership. I hope that my colleagues will accept that my gaffe was inadvertent.

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Uterine Perivascular Epithelioid Cell Tumors (PEComas) and Epithelioid Smooth Muscle Neoplasms

To the Editor.—I read with great interest the excellent article by Drs Toledo and Oliva[1] in which the authors enumerated a practical diagnostic approach to smooth muscle neoplasms of the uterus, with an emphasis in the current context on the distinction of uterine perivascular epithelioid cell tumors (PEComas) from uterine epithelioid smooth muscle neoplasms. As the authors note,[1] and as I have outlined elsewhere,[2,3] the precise nature of the relationship between these 2 neoplastic processes is unclear, as is whether they merely represent different points on a single clinicopathologic spectrum. This is primarily attributable to the substantial overlap in clinicopathologic features that exists between them. Nevertheless, they are recognized separately in the World Health Organization classification,[4] and their routine separation is therefore the standard of practice. I agree with the diagnostic approach and distinguishing features outlined by the authors. Additionally, I wish to call attention to a recent report by Adachi et al[5] in which the authors found that PEComas from many anatomic locations express CD1a by immunohistochemistry. We evaluated 18 uterine corpus epithelioid smooth muscle neoplasms (12 epithelioid leiomyomas, 6 epithelioid leiomyosarcomas) and found them all to be CD1a negative.[6] This marker may therefore be of diagnostic utility and provides further evidence of PEComas as a distinct tumor group, separate from epithelioid smooth muscle neoplasms.

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