

# The Impact of a Gross Anatomy Curriculum With Donor Family Interaction: Thematic Analysis of Student Letters to Silent Mentors

Shao-Yin Chu, MD, MS, Ting-Chun Tseng, MS, Yun-Chi Ho, PhD, and Guo-Fang Tseng, MS, PhD

## Abstract

### Purpose

Tzu Chi University's anatomy curriculum incorporates interaction with donors' families and regards body donors as silent teachers and altruistic role models. In this silent mentor program (SMP), students learn about their donor's life before dissection to better appreciate the selfless donation. This study explores the influence of the program on students' humanistic literacy based on student letters to silent mentors, which students wrote near the end of the program and laid by the silent mentor during the coffin ceremony.

### Method

The study included 125 letters from third-year medical students who took the gross anatomy curriculum in academic

years 2015, 2016, and 2017. With student consent, the program collated and published the letters in the open-access SMP yearbook. Using thematic analysis, the authors manually analyzed the letters in their original Mandarin, with the names of students made anonymous to ensure the authors were blind to students' identity throughout the study.

### Results

The analysis identified 3 themes and 11 subthemes. Theme 1, my silent mentor, included 3 subthemes: life characteristics, altruistic attitude, and expectation of offering body. Theme 2, connection to silent mentor and family, included 4 subthemes: intersubjective bonding, emotive first encounter, spiritual communication, and encouragement

from silent mentor. Theme 3, reflection and transformation, included 4 subthemes: reflection on life and death, professional self-expectation, inner transformation, and feedback action.

### Conclusions

The findings suggest that interactions with donors' families increased students' appreciation of the donation and enhanced students' humanistic literacy. Further, the letters seem to indicate that the SMP inspired students to develop a grateful, respectful, and empathic attitude toward life and their career. Thus, by implementing similar programs, gross anatomy curricula could go beyond the acquisition of structural knowledge to the cultivation of medical students' humanistic literacy.

Besides knowledge and skills, medical education involves identity formation, including accountability, humanism, and altruism.<sup>1</sup> However, there is a serious dichotomy between the biomedical and the humanistic aspects of medical education, as the former dominates the curriculum while the latter has been kept at the periphery, usually only

addressed in add-on or elective courses.<sup>2</sup> In addition, the 2 are hardly ever integrated into the curriculum.<sup>2</sup> Gross anatomy teaching, a fundamental part of the medical education, is experiencing a similar dilemma. Aside from books, lectures, and dissection,<sup>3-6</sup> digital innovations such as online resources, 3D models, augmented reality, and virtual reality are now parts of the anatomy teaching toolkit.<sup>7-9</sup> However, none of these new additions aim to enhance the role of anatomy teaching in nurturing humanistic values in medical trainees.

Starting around 30 years ago, a wave of medical curricular reforms emphasizing core competencies and social needs swept through Taiwan. At this time, Taiwanese medical schools adopted an integrated organ system-based curriculum so that the classical standalone anatomy course was broken up into different teaching blocks within several courses. To encourage the active participation of students, problem-based learning and student-centered didactics centered on the biomedical aspect of medical

education dominated the curriculum.<sup>10</sup> This limited the time available for the anatomy lab and inadvertently deemphasized gross anatomy. This appeared to be a global trend as well, although many anatomists have called for the cultivation of altruism, humanity, and empathy through gross anatomy to be emphasized.<sup>7,11-13</sup>

Tzu Chi University (TCU), founded in 1994 in Hualien, Taiwan, aims to train caring medical professionals for the underserved. The university, with assistance from its founder the Buddhist Compassion Relief Tzu Chi Foundation, pioneered the silent mentor program (SMP) and campaigned for donated bodies for anatomy teaching at a time when other medical schools in Taiwan relied entirely on unclaimed bodies. At TCU, body donors are regarded as silent teachers and altruistic role models, rather than as nameless specimens.<sup>14-16</sup>

Interaction with donors' families was integrated into TCU's anatomy curriculum. Students visited their donor's

Please see the end of this article for information about the authors.

Correspondence should be addressed to Guo-Fang Tseng, Department of Anatomy, School of Medicine, Tzu Chi University, No. 701, Sec. 3, Zhongyang Rd., Hualien City, Hualien County 970374, Taiwan; telephone: +886 (3)856 5301, ext. 7162; email: guofang@mail.tcu.edu.tw.

Copyright © 2022 The Author(s). Published by Wolters Kluwer Health, Inc. on behalf of the Association of American Medical Colleges. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

Acad Med. 2022;97:1065-1070.

First published online March 29, 2022.

doi: 10.1097/ACM.0000000000004678

family to learn about the donor and get acquainted with the family during the summer recess before dissection to better appreciate the selfless donation. Families were invited to the university to join the students for the beginning and closing ceremonies before and after the dissection semester in the fall. During the semester, each dissection session was preceded with a silent prayer and ended with a deep bow of thanks. At the end of the semester, students repositioned all of the organs and tissues and carefully sutured to reshape the silent mentor's body before dressing the silent mentor for the coffining, send-off, cremation, and gratitude ceremonies after winter recess. Families were again invited to the university in late February to mid-March the following year to join the coffining, send-off, cremation, and gratitude ceremonies to conclude the program. Each student wrote a letter to their silent mentor and laid it by the silent mentor during the coffining ceremony. In short, unlike conventional anatomy classes centered solely on learning structural knowledge,<sup>10</sup> the SMP intentionally sought to foster humanistic values in medical students.

At first, this program was viewed as implausible in Taiwan. However, it has thrived and received overwhelming support from the general public.<sup>17</sup> It is now adopted fully or in part by all medical schools in Taiwan as well as by many medical schools throughout Asia. Despite the popularity of the SMP, there have been limited and/or partial reports on it.<sup>15,18-21</sup> Here we studied the student letters to silent mentors and analyzed the influence of the SMP on medical students' humanistic literacy.

## Method

### Study context

The TCU School of Medicine takes about 50–60 high school graduates each year, and medical students take gross anatomy with dissection in their third year. We analyzed 125 letters from 24 of 56 (42.9%), 54 of 57 (94.7%), and 47 of 49 (95.9%) third-year TCU medical students who took the gross anatomy curriculum in academic years 2015, 2016, and 2017, respectively. Twelve silent mentors were dissected in each of these academic years. Donors and families were fully aware of how the SMP worked and agreed on

participation in the program. Participating students agreed on the publication and collation of their letters in the open-access SMP yearbook (see below).

### Data source

The letters we analyzed were open-access materials available in the SMP yearbook on the TCU Medical Simulation Center website (<http://www.msc.tcu.edu.tw/ebook.html>). We obtained permission for the present study from the SMP of TCU. The study was deemed exempt from institutional review board review by the Research Ethics Committee of the Hualien Tzu Chi General Hospital (IRB110-106-C).

### Data analysis

We manually analyzed the letters based on Braun and Clarke's thematic analysis within the interpretivist paradigm.<sup>22,23</sup> Letters were analyzed in their original Mandarin, with the names of students made anonymous to ensure we were all blind to students' identity throughout the study.

Regarding the 4 authors, S.-Y.C. is a clinician–educator, T.-C.T. is a fifth-year medical student who was not in any of the studied classes, Y.-C.H. is a professor of education, and G.-F.T. is an anatomy teacher, all at TCU. None of us had any specific or unusual influence on the original data or the analysis for this retrospective study.

The first 2 authors (S.-Y.C. and T.-C.T.) read all of the student letters available in the SMP yearbook from academic years 2015, 2016, and 2017 ( $n = 125$ ) and took notes on key contents. After a series of discussions, they came to an agreement on the coding of the key contents of these letters. With back and forth reviewing and discussion, the 2 authors reached a consensus on defining the themes and subthemes, reached thematic saturation (i.e., no new themes arose), and completed data collection. To ensure reliability and persuasiveness, all 4 authors engaged in thorough discussions until reaching consensus on the analysis. Finally, a professional linguist translated the excerpted quotes from Mandarin into English for their inclusion in the Results (see below). All 4 authors reviewed the translated quotes and agreed that they reflect the original meaning in Mandarin. A list of the quotes presented here in both the original Mandarin and translated

English can be accessed at <http://www.msc.tcu.edu.tw/ebook.html> via the "Acad Med supporting material-quotes" link.

To improve the soundness of this qualitative study, the report was written following the standards for reporting qualitative research.<sup>24</sup> To enhance the readability, the report has been read and edited by professional academic English speakers (see Acknowledgments).

## Results

The student letters ( $n = 125$ ) ranged in length from 800 to 2,000 Mandarin words. Most were in paragraph format, while a few were in other formats, such as poetry or diary format. Overall, 3 themes and 11 subthemes were identified (Table 1). Among the 11 subthemes, the most frequently used were altruistic attitude and expectation of offering body of theme 1 (my silent mentor), spiritual communication and intersubjective bonding of theme 2 (connection to silent mentor and family), and inner transformation of theme 3 (reflection and transformation), all of which were mentioned in 100 or more letters (see Table 1). Representative quotes for themes and subthemes are given below and are labeled using the following format: academic year-randomly assigned student letter number.

### Theme 1: My silent mentor

In theme 1, students developed an internal image of their silent mentor and their life based on the stories they were told and the pictures they were shown during the home visit and subsequent interactions with the family during the program. This theme included 3 subthemes: life characteristics, altruistic attitude, and expectation of offering body.

In the first subtheme, students described their feelings of been touched and inspired by stories about their silent mentor. Students mentioned several aspects of their silent mentor's life, including habits, hobbies, and positive traits. For example, one student wrote:

My teacher was a warm-hearted and gifted woman. Apart from singing and playing musical instruments, she enjoyed household chores and cooking homemade delicacies such as peanut brittle, reflecting her love and attentive care of her family. (2016-43)

Table 1

**Themes and Subthemes of Student Letters to Silent Mentors (n = 125), Silent Mentor Program, Tzu Chi University, Hualien, Taiwan, Academic Years 2015, 2016, and 2017**

Theme	Subtheme	Presence in letters, no. (%)
My silent mentor	Life characteristics	79 (63.2)
	Altruistic attitude	116 (92.8)
	Expectation of offering body	102 (81.6)
Connection to silent mentor and family	Intersubjective bonding	108 (86.4)
	Emotive first encounter	80 (64.0)
	Spiritual communication	111 (88.8)
	Encouragement from silent mentor	86 (68.8)
Reflection and transformation	Reflection on life and death	55 (44.0)
	Professional self-expectation	77 (61.6)
	Inner transformation	100 (80.0)
	Feedback action	71 (56.8)

In the second subtheme, students reflected on and revered the silent mentor's life philosophy, altruism, and spirit of giving. Students also looked on their silent mentor as a role model. As one student noted:

... I thought about donating clothes, furniture, blood, and organs; donating my body, however, had never come to my mind. To me, my teacher showed great altruism and determination to put his body to great use after death. His courage, spirit of giving, and wisdom in extending life's value will remain forever in my heart. (2016-32)

In the third subtheme, students highly appreciated the donation and described that their silent mentors wanted medical students to put their bodies to great use:

I'm extremely thankful that my silent mentor's final wish was to let doctors or trainees make hundreds or thousands of cuts on his body rather than doing anything wrong on patients. (2015-14)

### Theme 2: Connection to silent mentor and family

Theme 2 described students' tie to the silent mentor and family, which propelled the students toward becoming caring professionals in the future. It included 4 subthemes: intersubjective bonding, emotive first encounter, spiritual communication, and encouragement from silent mentor.

In the first subtheme, students described that through the home visit, they not only learned about the silent mentor but also established a

close intersubjective relationship with the silent mentor and family. Some remained close and corresponded regularly with the family during the program; some expressed that they would work hard to meet the expectations of the silent mentor and family throughout their medical career. For example, students noted:

I recalled during the beginning ceremony, my silent mentor's big brother held both my hands and asked that I work hard to learn; this body language represented the sincerest wish and unyielding trust ... touching me deep in my heart. (2016-46)

I told myself that I should try my best not to fail the humble wishes brought along with this selfless offering. (2015-06)

In the second subtheme, students were emotive the moment they lifted the covering and saw the silent mentor for the first time at the beginning ceremony. Although it was an emotive experience, students were respectful, touched, and grateful, not scared:

I recalled when I lifted up the white linen in the beginning ceremony and saw you for the first time, hot tears welled up in my eyes. I was deeply touched by your selfless offering and my heart filled with respect, but not fear. (2017-16)

In the third subtheme, student's connection with the silent mentor and family deepened as the dissection semester proceeded. Students communicated spiritually with silent mentors in prayer before every lab, sharing their ups and downs, joy and sadness, and even secrets. As one student wrote:

I treasured the prayer before each dissection lab. ... I indulged myself, telling you my ups and downs and joy and sadness ... Thanked you, my silent mentor, for you were always there for me, cheered me up in my loneliest days and warmed me up when I was depressed. Although you never said a word, you were deep in my heart. ... (2017-05)

In the fourth subtheme, students described being intangibly motivated, encouraged, and accompanied by the silent mentors. The serene smile of the silent mentor eased the frustrations they encountered, accompanied them through learning obstacles, and provided some relief from their stressful course load. For example, one student wrote:

... your smiling encouragement and the words "don't be afraid" empowered me to make the first cut on your body. Your smile calmed me down and set my worries free. Your smile worked like a booster shot that lasted from the first incision to the last stitch. (2016-08)

### Theme 3: Reflection and transformation

Theme 3 captured the evolvement of students' reactions during the program. It included 4 subthemes: reflection on life and death, professional self-expectation, inner transformation, and feedback action.

In the first subtheme, students pondered over life and death and reflected on the meaning or value of life. Some students expressed they sometimes subconsciously thought of the silent mentor as being alive. For example, some students worried that the cuts they made would hurt and about the unnecessary suffering that the silent mentor might have experienced when they inadvertently made inappropriate cuts. Students noted:

Compared to similar-age college peers, I was privileged to have this unique life experience and to face death. You taught me anatomical knowledge and most importantly about life. ... (2017-08)

One day, I used a scalpel to cut through your upper lip, I suddenly came to a halt as this might hurt you very much. I turned and spoke to my lab tutor, Ms. Tan, "This must be very painful. Do you think my silent mentor is feeling the pain now?" She paused for a few seconds and replied, "No worry, she must be very comforted since you are fulfilling her will. ..." (2016-20)

In the second subtheme, students described how their silent mentor inspired them to be competent doctors as well as physicians with humanistic values; to care for patients holistically; and to be humane, respectful, and empathetic professionals:

You guided me to be more humanistic in my professional career. A physician should take care of disease and look after the souls of the patients, being considerate and empathic to ensure that patients receive the warmest holistic care. (2017-28)

In the third subtheme, students described their transformations from a careless college student mindset to that of a real medical student ready to take professional responsibility. The SMP had helped them to take a big step toward becoming a medical doctor. For example, students wrote:

... I experienced a major psychological transformation with this gross anatomy curriculum. It helped me take a big step toward my future career as a physician. (2017-42)

I turned from a junior college student centered on enjoying life to realizing that I will soon be a medical doctor. The expectations from my silent mentor urged me to be more devoted and responsible. (2016-21)

In the last subtheme, students described concrete feedback actions they took to honor the silent mentors and families during the program. For instance, students voluntarily organized a tea and dessert offering to their silent mentors on Teacher's Day, September 28. This annual activity, symbolic of respect and gratitude, is now a tradition of the TCU SMP. At the end of the dissection semester, students repositioned all the tissues and organs and sutured the silent mentors' bodies to their original shapes, wrapped the bodies with gauze to soak excess fluid for weeks, and then dressed the silent mentors properly for a dignified confining, send-off, and cremation. As students wrote:

My dear silent mentor, do you remember the day we served tea and snacks to you on Teacher's Day? That was the moment we showed our deepest appreciation. (2016-17)

At first, I didn't see why we have to suture the silent mentor after dissection. We could just wrap the body with gauze. As the dissection proceeded, it became clear that gauze wouldn't do the job; it required

careful stitch by stitch suturing. We tried our best to neatly suture the skin to return you to how you looked when we first met. ... (2015-19)

As a whole, students appeared to be extremely careful with their choices of words; for example, honorifics were consistently used to address silent mentors and families. Students also expressed their sincere appreciation for the SMP. They thanked the altruistic offerings of the silent mentors and families and the efforts of the university, anatomy department, and Tzu Chi volunteers, which made it possible for them to have a unique experience that they felt would remain with them throughout their lives and careers.

## Discussion

### An anatomy curriculum with an emphasis on humanistic literacy

Gross anatomy, perhaps the oldest medical discipline, relies on the dissection of human bodies to learn structures and organs. The practice was especially crucial in the past, but the advancement of newer disciplines and curricular reforms have led to debate over whether dissection, or even anatomy, is still essential to medical education.<sup>3-6</sup> In addition, gross anatomy has generally not been considered to be a part of the medical curriculum that can be used to teach about the humanistic aspect of medical education.<sup>2,13</sup> It was in this environment that TCU, which aims to train caring medical professionals for the underserved, pioneered the SMP. Besides learning human body structures and organs, the SMP aims to foster humanistic values in medical students. To this end, a series of events where students learn about the donors and interact with donors' families was intertwined with classical dissection-based teaching.

In this study, we conducted a thematic analysis of student letters to silent mentors to find out how the SMP affected students' humanistic literacy. Our findings suggest that interaction with donors' families enhanced students' understanding of the donors and led students to portray silent mentors and their lives positively. Students reported appreciating the selfless donation, which led them to view the dissected as a

person rather than as a specimen. This recognition then seemed to develop into a close spiritual relationship between students and silent mentors and a close bonding with donors' families. Student letters suggest that students were empathic, concerned about how the silent mentor felt in the spiritual world, and cared about fulfilling their mentor's wishes; this transformative process seemed to drive students to reflect on the meaning and value of life. Students further reflected that this transformative process resulted in resolutions to better prepare themselves to be responsible, considerate, and empathic medical professionals. These changes suggest that TCU's humanism-based anatomy teaching program could be a way to subconsciously embed empathy cultivation into medical education. In psychology, the empathy-altruism hypothesis emphasizes a high correlation of empathy with altruism—that is, that an empathetic person is more likely to be altruistic.<sup>25</sup> Similarly, we believe that interaction between students and donors' families in our program has amplified students' understanding of the selflessness of the body donors and provided them with a scaffold for the evocation of an altruistic attitude toward life and career. Our results are consistent with an earlier report on the application of Buddhist ethics in the Malaya University surgery training SMP,<sup>14</sup> in which some students signed up to join a brief program with limited student and donor family interaction.

In summary, our results suggest interaction with donors' families can be added to conventional gross anatomy dissection programs to foster humanistic values in medical students. Our results also lend themselves to the argument against gross anatomy curricula that include dissection being an obsolete form of training. On the contrary, it appears they can provide transformative learning<sup>26</sup> about humanistic values in medical students that is pivotal in modern medical education.

### Facing the dead

Gross dissection lab is unique in that students, often for the first time, face the human corpse. The emotional responses, often uncomfortable and disturbing, can be a barrier to learning. This has been a long-standing issue in medical

schools using unclaimed bodies. It has also been an issue in medical schools that use donated bodies but that conceal the donor's identity, which forces students to detach themselves from an emotional connection with the donor.<sup>27-29</sup> This detachment of feeling from a human body (i.e., dehumanization) may influence students to withdraw from situations they do not want to be involved in and suppress the cultivation of empathy. The SMP, on the contrary, capitalized on the bond developed between students and donors and donors' families to overcome this barrier. Students did not mention a sense of guilt over the dissection and referred to the donors as teachers or silent mentors, never as cadavers. The letters seem to indicate that the students in this program kept a respectful attitude and grateful mindset toward their donor and their donor's family and behaved in a dignified manner both in the lab and during interactions with donors' families, as a way to try to fulfill the wishes of their silent mentors. In addition, this grateful attitude and behavior is particularly comforting and supportive to the donors' families as they often shared during the gratitude ceremony and is likely a cause for the public acceptance of body donation to this SMP.

There are nevertheless limitations to analyzing student letters to silent mentors to fully interpret the influence of the SMP on students' humanistic literacy. Timing-wise, the letters were written before a few important interactions involving both students and donors' families, including the coffining, send-off, cremation, and gratitude ceremonies and the honoring of silent mentors' remains in the TCU great giving hall, and thus were somewhat premature. On the other hand, what was written in the letters was unlikely to reflect the whole spectrum of students' feelings as well given that it is not easy to fully express one's feelings at any instant and feelings usually grow and mature with time and experience in life. Thorough surveys and perhaps longitudinal studies may be warranted to fully expound on the influence of the SMP on medical students.

## Conclusions

The SMP, a program that regards body donors as teachers and altruistic

role models, integrates humanistic interactions with donors' families into a gross anatomy curriculum. Thematic analysis of student letters to silent mentors suggests that interactions with donors' families increased students' appreciation of the donation and fostered students' humanistic literacy. Further, the letters seem to indicate that the program inspired students to develop a grateful, respectful, and empathic attitude toward life and their career. Thus, by implementing similar programs, gross anatomy curricula could go beyond the acquisition of structural knowledge to the cultivation of humanistic values in medical students.

*Acknowledgments:* The authors wish to thank the faculty and staff of the Department of Anatomy, the Medical Simulation Center (MSC), and the School of Medicine; the secretariat of Tzu Chi University (TCU); Tzu Chi volunteers; and dharma masters of the Jing Si Abode for their assistance and support in running the silent mentor program (SMP). In addition, the authors are grateful to Dr. Elise Anne DeVido (associate professor and head) and Ms. Jenny Lee (lecturer) of the Foreign Language Education Center of the TCU for reading and editing this article.

*Funding/Support:* None reported.

*Other disclosures:* None reported.

*Ethical approval:* The study was deemed exempt from Institutional Review Board review by the Research Ethics Committee of the Hualien Tzu Chi General Hospital (IRB110-106-C).

*Data:* The letters used for this analysis were open-access materials in the SMP yearbook on the MSC of the TCU website (<http://www.msc.tcu.edu.tw/ebook.html>). The authors have permission from the SMP of TCU for the present study.

**S.-Y. Chu** is associate professor, School of Medicine, Tzu Chi University, and Department of Medical Education and Pediatrics, Buddhist Tzu Chi General Hospital, Hualien, Taiwan.

**T.-C. Tseng** is a medical student, School of Medicine, Tzu Chi University, Hualien, Taiwan.

**Y.-C. Ho** is professor, Institute of Education, Tzu Chi University, Hualien, Taiwan.

**G.-F. Tseng** is professor, Department of Anatomy, School of Medicine, and director, Medical Simulation Center, Tzu Chi University, Hualien, Taiwan.

## References

- Cooke M, Irby DM, O'Brien BC. Educating Physicians: A Call for Reform of Medical School and Residency. Hoboken, NJ: Jossey-Bass; 2010.
- Pedersen R. Empathy development in medical education—A critical review. *Med Teach*. 2010;32:593–600.
- McMenamin PG, McLachlan J, Wilson A, et al. Do we really need cadavers anymore to learn anatomy in undergraduate medicine? *Med Teach*. 2018;40:1020–1029.
- Dharmasaroja P. Do we not really need cadavers anymore to learn anatomy in undergraduate medicine? *Med Teach*. 2019;41:965–966.
- McLachlan JC, Bligh J, Bradley P, Searle J. Teaching anatomy without cadavers. *Med Educ*. 2004;38:418–424.
- Yammine K. Evidence-based anatomy. *Clin Anat*. 2014;27:847–852.
- Iwanaga J, Loukas M, Dumont AS, Tubbs RS. A review of anatomy education during and after the COVID-19 pandemic: Revisiting traditional and modern methods to achieve future innovation. *Clin Anat*. 2021;34:108–114.
- Azer SA, Azer S. 3D anatomy models and impact on learning: A review of the quality of the literature. *Health Prof Educ*. 2016;2:80–98.
- Pujol S, Baldwin M, Nassiri J, Kikinis R, Shaffer K. Using 3D modeling techniques to enhance teaching of difficult anatomical concepts. *Acad Radiol*. 2016;23:507–516.
- Fountain TK. Anatomy education and the observational-embodied look. *Med Stud*. 2010;2:49–69.
- Stephens GC, Rees CE, Lazarus MD. How does donor dissection influence medical students' perceptions of ethics? A cross-sectional and longitudinal qualitative study. *Anat Sci Educ*. 2019;12:332–348.
- Guo K, Luo T, Zhou LH, et al. Cultivation of humanistic values in medical education through anatomy pedagogy and gratitude ceremony for body donors. *BMC Med Educ*. 2020;20:440.
- Hildebrandt S. The role of history and ethics of anatomy in medical education. *Anat Sci Educ*. 2019;12:425–431.
- Lin SC, Hsu J, Fan VY. "Silent virtuous teachers": Anatomical dissection in Taiwan. *BMJ*. 2009;339:b5001.
- Santibanez S, Boudreaux D, Tseng GF, Konkel K. The Tzu Chi Silent Mentor Program: Application of Buddhist ethics to teach student physicians empathy, compassion, and self-sacrifice. *J Relig Health*. 2016;55:1483–1494.
- Henry LR, Hooker RS, Statler M. Physician assistant students and their cadavers: Narratives on the gross anatomy experience. *J Physician Assist Educ*. 2002;13:17–23.
- Habicht JL, Kiessling C, Winkelmann A. Bodies for anatomy education in medical schools: An overview of the sources of cadavers worldwide. *Acad Med*. 2018;93:1293–1300.
- Hong MK, Chu TY, Ding DC. How the silent mentor program improves our surgical level and safety and nourishes our spiritual life. *Gynecol Minim Invasive Ther*. 2017;6:99–102.
- Lai HL, Perng SJ, Huang CY. Nursing students' perceptions of a silent mentor program in an anatomy course. *Anat Sci Educ*. 2019;12:627–635.
- Chiou RJ, Tsai PF, Han DY. Effects of a "silent mentor" initiation ceremony and dissection on medical students' humanity and learning. *BMC Res Notes*. 2017;10:483.

- 21 Chen GM, Chang C, Yu T. Letters to silent teachers in Tzu Chi Medical School: A spiritual interaction. *Death Stud.* 2011;35:441–454.
- 22 Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3:77–101.
- 23 Braun V, Clarke V. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qual Res Psychol.* 2021;18:328–352.
- 24 O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: A synthesis of recommendations. *Acad Med.* 2014;89:1245–1251.
- 25 Bateson CD, Ahmad N, Lishner DA, Tsang J. Empathy and altruism. In: Snyder CR, Lopez SJ, eds. *Handbook of Positive Psychology.* New York, NY: Oxford University Press; 2002;485–498.
- 26 Mezirow J. *Transformative Dimensions of Adult Learning.* San Francisco, CA: Jossey-Bass; 1991.
- 27 Crow SM, O'Donoghue D, Vannatta JB, Thompson BM. Meeting the family: Promoting humanism in gross anatomy. *Teach Learn Med.* 2012;24:49–54.
- 28 Talarico EF Jr. A change in paradigm: Giving back identity to donors in the anatomy laboratory. *Clin Anat.* 2013;26:161–172.
- 29 Williams AD, Greenwald EE, Soricelli RL, DePace DM. Medical students' reactions to anatomic dissection and the phenomenon of cadaver naming. *Anat Sci Educ.* 2014;7:169–180.