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Developing "a Way of Being": Deliberate Approaches to Professional Identity Formation in Medical Education

Latha Chandran[1] · Richard J. Iuli[1] · Lisa Strano-Paul[1] · Stephen G. Post[1]

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Professional socialization and the development of reflective capacity are critical elements that shape a medical trainee's professional identity. A 2010 Carnegie Foundation Report argues that professional identity formation should be an important focus of medical educators and that identity transformation remains the *highest purpose* of medical education [1]. Education achieves this highest purpose when a person develops new ways of thinking and relating with peers [2]. Ultimately, the professional ideal is to develop physicians who can bring their "whole person to provide whole person care" [3]. An ideal professional identity embraces empathy, mindful attention to patient care, integrity, self-awareness, teamwork, beneficence, respect, and equal regard for all, as well as an eagerness to learn, resilience, and attention to self-care. Professional identity formation has antecedents in the student's life prior to matriculation into medical school, but it is a lifelong endeavor, achieved through critical reflection and exposures to role models who "pass the torch" from generation to generation. Professional identity formation is measured externally by reputation for excellence among peers and patients.

In this paper, we discuss how at Renaissance School of Medicine at Stony Brook University we have integrated evidence-based approaches to enhance professional identity formation among our trainees and faculty. In a time of increasing burnout among physicians and trainees, we believe purposeful integration of such approaches into an institution's learning processes may enhance resilience and a sense of belonging and well-being within a community of practice [4–7].

Definitions of Professional Identity Formation

In 1957, Merton stated that medical education should "shape the novice into the effective practitioner of medicine, to give him the best available knowledge and skills and to provide him with a professional identity so that he comes to think, act and feel like a physician" [8]. Rabow focused on the moral conflicts that students will face in medical practice, suggesting that the goal of professional identity formation is to anchor foundational principles in the trainee and prepare them to navigate such inevitable conflicts in the future [9]. Jarvis-Selinger discusses professional identity formation as developmental and adaptive processes at the individual and collective levels [10]. At the individual level, professional identity formation involves trainees' psychological development. At the collective level, professional identity formation involves appropriate socialization into the professional roles that allow for community participation. Cruess, Cruess, Boudreau, Snell, and Steinert redefined professional identity formation as "a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and feeling like a physician" [11]. Holden views professional identity formation as a transformative journey that involves ongoing integration of the profession's knowledge, skills, values, and behaviors into one's own individual identity [12].

Identity Formation, Evolution, and Integration

As shown in Fig. 1, three types of identities—individual, relational, and collective—dynamically interact within a community of practice to form a trainee's professional identity [13]. Based on social development theory and situated learning theory, trainees enter medical school with an individual identity shaped by their genetic predisposition and past personal experiences [14, 15]. Relational identity influences their

✉ Richard J. Iuli
Richard.Iuli@stonybrookmedicine.edu

[1] Stony Brook University, Stony Brook, New York, NY, USA

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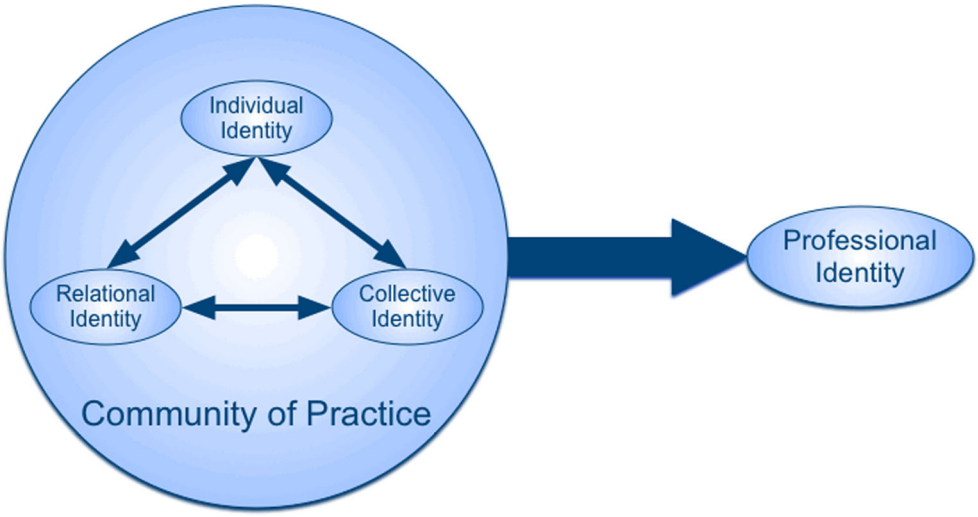

Fig. 1 The development of professional identity occurs through the dynamic interaction of individual, relational, and collective identities within a community of practice

individual identity as they navigate relationships in social environments. The medical profession's collective identity, with its explicit and implicit norms, hierarchies, values, and behaviors, heavily influences the dynamic evolution and molding of trainees' professional identity.

Professional socialization plays a key role in the transformation to a more mature personal and professional identity. Participation in a community of practice, initially peripheral and tentative, progresses to full participation through extensive social interactions, during which the individual's identity aligns with the community's values and beliefs. Continuous professional identity formation is sustained not only by mentorship and self-reflection, but also by experiences that uphold the best practices of the profession through negotiation, rejection, acceptance, emulation, and compromise [9]. These experiences may lead to "repression" of elements of one's individual identity, but throughout the developmental process, an enduring core of personal values remains [16].

The Significance of Professional Socialization

Socialization has been defined as "the process by which a person learns to function within a particular society or group by internalizing its values and norms" [17]. Whereas training results in new knowledge and skills, socialization develops identity: an "altered sense of self" [18]. Multiple factors influence professional socialization in medicine. The shaping influence of role models and mentors occurs explicitly by observation of and reflection on a variety of clinical encounters and tacitly by way of experiences that affect the learner more subtly (e.g., via the hidden curriculum). Influential factors include a sense of security and trust in the learning environment; attitudes displayed by patients, peers, and superiors; complexities of the healthcare system; curricular elements that focus on professional ethics and enhance reflective capacity; professional symbols and rituals; and personal well-being, connectedness, and support of family and friends [19]. During professional training, students learn how to deal with clinical uncertainty and moral ambiguity and how to play their part in the community of practice. Emotional responses to personal experiences during professional socialization can range from detachment, cynicism, anxiety, and stress on the one hand, to joy, meaning, and gratification on the other. Matured socialization is typically accompanied by an increasing sense of self-confidence and competence.

Role models and mentors are members of a community of practice whom the student seeks to emulate in actions and beliefs [10]. Through conscious observation and imitation and powerful subconscious patterning of behavior, the learner internalizes a model of professional identity. Although much has been written about the significant negative impact of a toxic work environment and negative role modeling on professional identity formation, a recent systematic review found that the overall impact of role models in professional identity formation is mostly powerful and positive [20].

Clinical experiences with patients and families are fundamentally important in professional identity formation. Positive experiences build the trainee's nascent sense of competence and self-confidence and can reinforce the values and behaviors expected in their professional role. Providing pedagogic space for conscious reflection, writing, and discussion of clinical experiences within mentor-guided circles of trust is fundamental to socialization and professional identity formation. Curricular opportunities for reflection, such as mentor-facilitated discussion groups or narrative writing, enable learners to participate actively in the construction of their own professional identities [10, 21].

Professionalism and Professional Identity Formation

Professionalism and professional identity formation are not the same thing, but they are bidirectional and considerably influence each other [22]. Professionalism is defined by the set of values and virtues espoused by the profession including universally accepted core values such as competence, compassion, and integrity. Professional identity formation is the *journey* of assimilating individual identity into the professional ethos of the community of practice, thereby constructing a "fully integrated moral self" [23]. Professional identity does not develop in a linear fashion, nor is it monolithic. Sentinel learning experiences can stimulate big leaps in the development of a trainee's integrated self.

Assessing professionalism and professional identity formation is challenging. How does one distinguish a professional's exhibited behaviors from the quality of his/her inner life? Assessment must be longitudinal and embrace complexity and nuance. Providing formative feedback to trainees using mixed methods and descriptive narratives can be quite helpful. To assess professional identity formation, Cruess et al. amended Miller's pyramid of assessment (knows, knows how, shows how, does), to include a higher level of "being" (Fig. 2) [24]. In supporting learners' development of professional identity, faculty must encourage diversity in a way that maximizes individuality and enhances rather than inhibits professional identity formation [21].

Curricular Strategies to Enhance Professional Identity Formation

We posit that medical educators should be deliberate and mindful in creating learning opportunities and pedagogic space to enhance the professional identity formation of their trainees. Wald describes three vital elements in professional identity formation: reflection, relationships, and resilience [25].

Reflection Sharing personal narratives in trusted mentor-facilitated peer groups supports the social construction of professional identity. In such groups, trainees can compare their own perspectives with those of their peers, reflect upon, and either accept or reject others' ideas as they dynamically construct their professional identity. Wald depicts reflective capacity as the roots of a tree that are fertilized by mentor feedback and exposure to the humanities. These promote development of the tree's crown, which consists of habits of heart, mind, and practice that enhance well-being. These strengths, in turn, are manifested externally as communication skills, humanism, emotional intelligence, and moral behaviors [25].

Relationships Curricular approaches that encourage professional identity formation help to build authentic trainee relationships with peers, mentors, and role models, as well as with patients, families, and communities. The Association of American Medical Colleges recognizes the significant impact of the *whole* learning environment on professional identity formation, emphasizing the need for students to freely and safely discuss vulnerabilities, self-doubts, and ethical dissonances. Medical educators have a duty to make efforts to mitigate the negative and augment the positive influences in the learning environment. Negative influences play a key role in driving the "hidden curriculum," which often teaches learners by implicit behaviors (e.g., domineering treatment of trainees and peers, stigmatization of certain types of patients) to treat others in ways that conflict with the overt rules of professionalism [26].

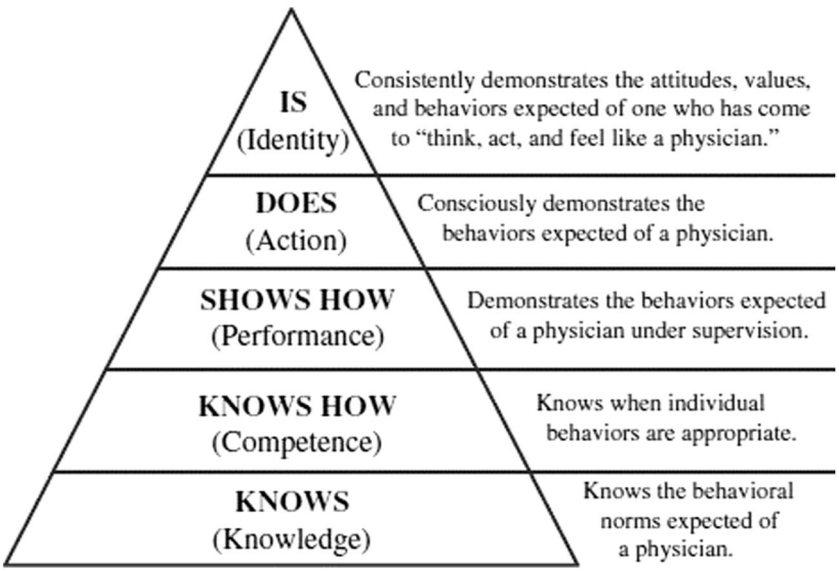

Fig. 2 Cruess, Cruess, and Steinert's amendment of Miller's pyramid of learner assessment for professional identity formation [24]. Reprinted with permission from Wolters Kluwer Health, Inc.

Table 1 Activities at Renaissance School of Medicine at Stony Brook University (RSOM) using reflection as a key strategy to enhance professional identity formation among medical trainees and interprofessional clinical care teams

Activity	Description
Medical students: phase I (foundational phase)	
My first patient—the cadaver	Small-group discussion and reflective writing on student experiences of their first patient, the cadaver, during The Body course. Near-peers facilitate discussions and provide students with written feedback on reflective essay.
Personal narrative	Students write a personal narrative on their own illness experiences during Medicine in Contemporary Society. Faculty facilitators provide students with written feedback.
Independent learning opportunities	As part of the Medicine in Contemporary Society course, students attend three self-selected learning opportunities (examples include departmental Grand Rounds and/or Schwartz Rounds [32], Morbidity and Mortality Conferences, SBHome Free Clinic, and colloquia on social and ethical issues). Students discuss their experiences in preceptor-facilitated small groups and write a reflective essay on each experience. Faculty preceptors provide individual feedback.
OSCE cases in professionalism	During the first week of medical school in the Transition to Medical and Dental School course, students are presented with two OSCE cases, one involving a specimen labeling error and the other health illiteracy. Students receive formative assessments from the standardized patients, followed by a faculty-facilitated large-group discussion. In one of the Themes in Medical Education blocks, students practice communicating prescribed pieces of difficult information in settings where communications with the patient are challenging in some way (e.g., a newborn's illness with parent, disruptive family members, surrogate pregnancy discussion).
Medical students: phase II (primary clinical phase)	
Personal character strengths and limitations	In the Transition to Clinical Care course at the start of Phase II, students write a short reflective essay on their perceived personal character strengths and limitations that they bring to the start of their clinical clerkships. Students read aloud and comment on one another's essays during faculty-facilitated small-group discussions.
Reflection rounds	In all required core clinical clerkships, students participate in mentor-facilitated small-group discussions focused on the human and emotional dimensions of learner experiences during clerkships. These Reflection Rounds are adapted from the George Washington Institute for Spirituality and Health.
Home hospice visit	In the Primary Care Clerkship, students participate in an interprofessional home hospice visit. Following the visit, students submit a reflective writing piece on how they process their human emotions as they relate to a patient experiencing end-of-life care.
OSCE cases in professionalism	Clerkship OSCEs include more challenging patients and involve difficult communication issues such as breaking bad news, discussion of brain death, non-compliant patients, psychotic patients, and domestic issues. Students receive standardized patient feedback on their performance, and they complete a reflective self-evaluation.
Medical students: phase III (advanced clinical phase)	
Physician role models	During the Transition to Residency course, students discuss in mentor-facilitated small groups their reflective writings on impactful positive and negative role models they have encountered during their clinical rotations.
The doctor I want to be	In the Transition to Residency course, faculty mentors facilitate peer-led small-group discussions on students' reflections about strategies to maintain one's personal integrity and idealism amidst environmental and ethical challenges of practicing medicine.
OSCE cases in professionalism	In the Transition to Residency course, students complete two scenarios including palliative care discussions and DNR with patient and family. Students also participate in interprofessional simulations that include acute or emergency situations that help them develop their teamwork, communication, professional identity, and leadership skills.
Residents and fellows	
Reflection rounds	Pediatric residents and fellows participate in monthly Reflection Rounds involving four small groups of eight residents and fellows and a faculty facilitator each. Reflection Rounds focus on the human side of the trainees' experiences on themes of integrity, meaning, resilience, and well-being. Periodic Reflection Rounds have been introduced in Neurology and in Internal Medicine.
Half-day professional identity formation retreat	The Center for Humanities, Compassionate Care, and Bioethics conducts a professional identity formation retreat for all residents and fellows. The retreat includes four 1-h small-group reflection sessions on themes such as resilience, meaning, and overcoming obstacles to growth.
Interprofessional clinical teams	
Departmental Schwartz Rounds [32]	Bi-monthly Schwartz Rounds are held in Stony Brook Children's Hospital where interprofessional clinical care teams gather to reflect on the human aspects of the clinician's response to difficult cases. All care providers involved in the case are invited to participate in a facilitated peer-group processing of the emotional dimensions of the case. Some groups may be as large as 80 participants. Topics that have come up include adolescent overdose deaths, feelings of personal failure and guilt, and processing medical errors.

Resilience Resilience has been defined as "the ability to maintain personal and professional well-being in the face of ongoing stress and adversity" [27]. It allows a person to respond to stress in a healthy way, "bouncing back" after challenges and growing stronger [28]. Professional identity formation can build a strong sense of shared social identity that buffers against adverse influences [29]. Individuals who work cooperatively based on mutual trust and respect form resilient teams that flexibly manage work complexities in the healthcare environment [30].

An individual with a strong professional identity is aware of future adversity and ready to surmount it by personal attitude, leadership, and, if needed, activism. Those entering the medical profession are generally highly motivated and empathic and have a strong sense of professional meaning, which is generally considered one of the most important qualities of a flourishing physician. The "marathon" of clinical practice has the potential to drain energy and produce burnout, especially if the hidden curriculum promotes the false idea that all physicians should be immune to fatigue and visible stress. To counteract this messaging, facilitated small-group reflection activities can serve as a source of vitality, resilience, and purpose for students, as well as faculty. Such group activities can develop intellectual stretching, ethical fitness, and emotional muscle to run the marathon successfully [25].

Table 2 Additional strategies to enhance professional identity formation among medical students, residents, fellows, and other healthcare professionals at Renaissance School of Medicine at Stony Brook University (RSOM)

Activity	Description
Resilience and well-being	
Student well-being groups	Among the student groups that focus on promoting student well-being are Medical Student Health, Happiness and Humanism, Lifestyle and Preventive Medicine, Art and Observation, Mindful Meditation and Yoga, and Alliance on Mental Illness.
Student-led physical activities	Students participate in a wide range of intramural sports, sport clubs, and fitness programs, sponsored by the Stony Brook University Recreation and Wellness Center. Medical student groups also sponsor events that engage the medical student and broader communities in activities aimed at promoting physical and mental health.
The Stony Brook Writing Community	Faculty and trainees meet monthly (about 80 participants) to read and discuss their own poetry and vignettes related to their clinical experiences and professional identity.
Evening of the arts	Annual event aims to show that medicine and art together make a more holistic healthcare professional. Art ranges from two- and three-dimensional artwork, including sculptures, drawings, and photography, to performance art, including dance, vocal, instrumental, theater, and magic performances.
Symbols and rituals	
Alumni gift—stethoscope	School of Medicine alumni give every new student the gift of a stethoscope to serve as a symbol of the medical profession.
White coat ceremony	During a White Coat Ceremony, which is held during the Transition to Medical and Dental School course, students sign the AAMC Teacher-Learner Compact, receive their white coat, and then recite the Hippocratic Oath as a ritual of entering the medical profession.
Cadaver donor remembrance ceremony	First-year students organize a solemn event involving family members of the donors, faculty, and students as a show of students' respect for the generosity of donors and families and as a sign of commitment to maintaining humanism throughout their medical careers.
Explicit institutional commitment	
Professional Identity Formation Working Group	The Professional Identity Formation Working Group at RSOM was established in 2016 to develop an institutional vision on professional identity formation and to develop a professional identity formation curriculum to promote and support trainees' and healthcare professionals' professional identity formation. The Professional Identity Formation Working Group is comprised of 20 interprofessional faculty, professional staff, and trainees.
Professional identity formation website	The professional identity formation website (https://renaissance.stonybrookmedicine.edu/pif) provides information and resources on the history of professional identity formation at RSOM, professional identity formation in the curriculum, student wellness, spotlight on professional identity formation at RSOM, and a calendar of professional identity formation events.
Invited speakers on professional identity formation	Richard Cruess, MD, and Sylvia Cruess, MD—Professional Identity Formation and Communities of Practice Workshop Amit Sood, MD—Living with Happiness and Resilience Ronald Epstein, MD—Mindful Practice in Medicine: How to Reduce Physician Burnout Hedy Wald, PhD—Professional Identity Formation, Self- Reflective Tactics and Resiliency Charles F. Reynolds III, MD—Burning Bright, Not Out: Preventing Physician Suicide

Professional Identity Formation at Renaissance School of Medicine at Stony Brook University

Our medical school's focus on professional identity formation goes back to its founding dean, Dr. Edmund D. Pellegrino, an innovator in medical and interdisciplinary health science education who was renowned for his scholarship in the philosophy of medicine, virtue theory, and medical humanities. Dr. Jordan J. Cohen, who served as dean from 1988–1994, created a four-year *Medicine in Contemporary Society* course that emphasizes medical humanism as the pathway to professional growth. Cohen defined humanism as "a way of being" that embraces obligations to others, especially those in need, and personal attributes such as altruism, duty, integrity, respect, and compassion [31]. "Humanism," he wrote, "provides the passion that animates authentic professionalism." In 2011, the Liaison Committee on Medical Education identified this legacy in professional identity formation as one of our institutional strengths. Details of our current professional identity formation curriculum are available at https://renaissance.stonybrookmedicine.edu/pif. Our school's professional identity formation-related activities use evidence-based approaches to foster professional identity formation (Table 1). As a foundation for trainee engagement in these formative activities, we posit that an explicit, seamless commitment at the highest levels of institutional leadership is essential for professional identity formation to be embedded in the organizational culture, and not undermined by the hidden curriculum.

In conclusion, in the tradition of Osler, Cushing, and others, we believe that the physician as humanist is as important to good medicine as the physician as scientist. Professional identity formation merits an institutionally supported, intentionally crafted, and longitudinally integrated curriculum across all years of medical school (Table 2). This curriculum should facilitate the creation of self-aware and resilient professionals by supporting students in elucidating who they are, who they wish to become, and why. Perhaps the best test of professional identity formation occurs when a trainee or clinician chooses to act with professional integrity, even when pressured to deviate from the humanist ideal. Medical education should be devoted to "bringing our whole person to whole person care," with educators explicitly committing to making the development of professional identity the "highest purpose" of medical education [3].

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Compliance with Ethical Standards

No IRB or ethical examination is indicated for this commentary.

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