Title page

Title: The liminal landscape of mentoring – stories of physicians becoming mentors

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Title: The liminal landscape of mentoring – stories of physicians becoming 1 2 mentors 3 4 **Abstract** 5 **Introduction**: This study explores narratives of physicians negotiating liminality while 6 becoming and being mentors for medical students. Liminality is the unstable phase of a learning 7 trajectory in which one leaves behind one understanding but has yet to reach a new insight or 8 position. 9 **Methods**: In this study, we analyzed semi-structural interviews of 22 physician mentors from 10 group-based mentoring programs at two Norwegian and one Canadian medical school. In a 11 dialogical narrative analysis, we applied liminality as a sensitizing lens, focusing on informants' 12 stories of becoming a mentor. 13 **Results**: Liminality is an unavoidable aspect of developing as a mentor. Which strategies 14 mentors resort to when facing liminality are influenced by their narrative coherence. Some 15 mentors thrive in liminality, enjoying the possibility of learning and developing as mentors. 16 Others deem mentoring and the medical humanities peripheral to medicine and thus struggle 17 with integrating mentor and physician identities. They may contradict themselves as they shift 18 between their multiple identities, resulting in rejection of the learning potentials that liminality 19 affords. 20 Conclusion: Mentors with integrated physician and mentor identities can embrace liminality 21 and develop as mentors. Those mentors with contradicting dialogues between their identities 22 may avoid liminality if it challenges their understanding of who they are, and make them 23 experience discomfort, confusion, and insufficiency while becoming a mentor. Support of the 24 mentoring role from the clinical culture may help these physicians develop internal dialogues 25 that reconcile their clinician and mentor identities. 26 27 28

1 1. Introduction

- 2 Transitioning between clinical and educational responsibilities, like mentoring medical students,
- 3 entails taking on potentially conflicting roles which may elicit negotiations of professional
- 4 identities ¹⁻³. Embracing a mentor identity may challenge a sense of purpose or initiate critical
- 5 reflection on the identities at play ⁴. Such resistance and reluctance to engage with the
- 6 educational discourse can be understood as a personal defense mechanism aimed at protecting
- 7 preexisting identities ^{5, 6}. However, there is little research into how mentors negotiate these
- 8 challenging aspects of becoming and being a mentor. With knowledge about how mentors
- 9 navigate these transitions, we may provide better mentor training and support, as well as secure
- more sustainable mentorship programs.

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- 12 In several learning philosophies, sensations of frustration and confusion are considered key to
- learning, such as Biesta's notion of education being "risky" ⁷. With risk, there may be anxiety
- and uncertainty, which can be necessary for learning beyond the trivial ^{8, 9}. Within the threshold
- 15 concept framework, this trajectory can be understood as a state of liminality ¹⁰. Liminality is the
- provisional stage in a learning trajectory where one way of understanding is left behind, and a
- 17 new insight or position is not yet arrived at ^{11, 12}. The mentoring context has its special meaning,
- relevance, and significance, which make the ways in which liminality is recognized, perceived,
- and negotiated by the individual unique and necessary to explore ¹³.

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- When facing liminality, believing that talent and abilities are dynamic and can develop over
- time, may help allocate motivation to tolerate confusion, and embrace challenges and criticism.
- In contrast, own traits can be understood as immutable, efforts as futile, and hence constructive
- 24 negative feedback may be ignored, and challenges avoided ^{14, 15}. Even though mentors often are
- 25 expected to cultivate professional becoming in their mentees, there has been limited attention
- 26 given to how mentors approach their own liminality and the possibility of learning through
- 27 struggling.

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- In the existing literature, it is hard to come by detailed narratives about the experience of
- becoming and being a mentor. Narratives are powerful representations of lived experience.
- 31 Where other methodological approaches often aim to reduce complexity and identify general
- principles or categories, narratives have the potential to convey interpretations, situatedness, and
- complexities in experiences ¹⁶. These qualities make narratives suitable for exploring the
- 34 flexible and fluid construct of mentoring ¹⁷.

1 In this study, we analyze narratives of becoming and being a mentor for medical students in 2 group-based mentoring programs. We sought to explore; how do mentors negotiate liminality? 3 4 2. Methods 5 2.1 Context This study draws on empirical data gathered among mentors from three undergraduate medical 6 7 programs, two in Norway and one in Canada. There are certain similarities between the 8 universities' mentorship programs; they offer longitudinal, group-based mentorship programs 9 for students; for each mentor group there are six to eight students, with one or two mentors; and 10 mentor groups meet approximately four to five times per year, generally outside the clinical 11 setting (e.g., in a mentors' home or at university campus). The mentorship programs have 12 common goals: to offer a safe space for reflection, to assist students in their transition from 13 layperson to professional, and to develop a person-centered mindset. All mentors have been 14 offered preparatory instructions and intermittent workshops. 15 16 2.2 Study design 17 This is a qualitative interview study, placed within the socio-constructivist paradigm, applying 18 dialogical narrative analysis on mentors' stories of becoming and being a mentor ¹⁸. The study 19 informants were recruited from a comprehensive survey in June 2017, in which we invited all 20 mentors from three universities (N=461). 148 out of 272 survey respondents agreed we could 21 contact them for a possible semi-structured interview. Through e-mail, we recruited a 22 convenience sample representative of the study population by gender, university affiliation, and 23 mentoring experience (N=22) (see Table 1). Among the 22 interviewed mentors, 13 were full-24 time clinicians, while nine also were engaged in research, teaching, or administration. 25 26 Between October 2017 and April 2018, three authors (ES, EHO, MK) and two research 27 assistants conducted semi-structured interviews. They did not interview mentors from their 28 affiliated university. The interviews were designed to elicit stories of becoming and being a 29 mentor, asking e.g., "what was your first experience as a mentor like?", "how did you learn to 30 be a mentor?", "what is a good mentor?" and "has being a mentor affected you or changed your 31 ways of being a person, teacher, or professional?". Interviews lasted 40-70 minutes, were 32 audiotaped and later transcribed verbatim before analysis. 33 34 The dataset has previously been analyzed, resulting in identification of threshold concepts in 35 mentoring 4. However, there was an unredeemed potential in the data for exploring how mentors

1 negotiate the liminal phases of mentoring. The present study provides additional contributions 2 as it introduces a new research question, using a different theoretical framework and 3 methodology, while filling a significant new knowledge gap and having distinct implications ¹⁹. 4 5 2.3 Methodology 6 Narrative inquiry is the study of stories in which "one thing happens in consequence of another" 7 ¹⁸. A whole story is a unit of analysis in which parts relate to the whole and cannot stand alone. 8 Such a stance enables a recognition of the situated nature of learning to be a mentor. Through 9 narratives, people "convey to themselves and to others who they are now, how they came to be, and where they think their lives may be going in the future" ²⁰. Dialogical narrative analysis 10 (DNA) is a specific method for exploring aspects of identity ²¹. With its roots in Bakhtin's 11 12 dialogism, DNA enables exploring how people construct identities through narratives within a 13 given context. 14 15 We searched for 'hidden dialogues' in the informants' narratives, drawing on Bakhtin's ideas on 16 the multiplicity of dialogue, narratives always being «populated by the voices of others» ²². 17 Dialogue is, in this perspective, seen as a meeting place in which own and other's opinions, values, attitudes, and intentions reverberate ²³. Avnon points to the idea of 'hidden dialogue', 18 meaning how the narrator, consciously or not, incorporates impulses from the surroundings, 19 20 contexts, and communities into the narrative ²⁴. Thus, a narrative may have layers of content and 21 significance, depending on whom the narrator wants or needs to be in dialogue with and which 22 identity they take on. For Bakhtin, a narrative is not entirely anyone's own, but is told as a 23 dialogue between multiple voices of self with rearranged elements of others' stories. The self is 24 seen as unfinalizable, dynamic, and ever-evolving. The identification of hidden dialogues 25 provides essential information about the narrator's identity, the shaping forces of this identity, 26 and the negotiation of the identity in an ongoing narrative. The narrative may thus contain 27 contradictions and inconsistencies, as the process is continuous, partly nonconscious, dynamic, 28 and changing. 29 30 2.4 Data analysis Three researchers read all transcripts independently (EAV, LMH, MK), identifying mentors' 31 32 strategies for negotiating liminality before collectively discussing these various approaches. We 33 identified four stories suitable for deeper analysis due to their apparent, variable features that 34 addressed the research question differently while displaying the complexity of mentoring. In 35 DNA, the selection of narratives is an act of practical wisdom (phronesis), basing the decision on insights developed as we analyzed the material ²¹. 36

1 2 We then performed the DNA, anchoring it in the following characteristic questions: 1) What 3 multiple voices can be heard in any single speakers' voice; how do these voices merge, and 4 when do they contest each other?; 2) What is at stake for whom?; 3) Who is holding their own 5 in the story?; 4) Why is someone choosing to tell a story?; and 5) How does the story teach 6 people who they are, and how do people tell stories to explore whom they might become? ²¹. To 7 help analysis, we created a table of who the stories were in dialogue with and the corresponding 8 identities of the narrator. Liminality functioned as a sensitizing lens, giving us a tool to explore 9 narratives that otherwise may come across as chaotic and dispersed, with a focus on learning 10 and identity formation. We revisited the rest of the material frequently, verifying that we could 11 understand other stories as closely related to the features we had identified and reconsidering 12 our choice of narratives for deeper analysis. At this point, we decided to present these four 13 narratives in the results section. They were chosen due to their varied illustration of the essential 14 aspects within the complete material that we found relevant to the research question. 15 16 As we explored theoretical literature, new nuances of meaning became more apparent. 17 Therefore, continuously revisiting the data during the writing process was necessary. The act of 18 writing the article became an essential part of the analysis, being a dialogue between us (the 19 researchers), the data (interview subjects), existing knowledge (theory), and the expected 20 readers of this article (you). 21 22 2.5 Fthical considerations 23 Choosing to present excerpts of narratives has ethical implications. We have taken 24 considerations to ensure that the mentors' stories we present are not recognizable to others. All 25 stories were given pseudonyms before analysis, and in this article, we omitted information 26 making re-identification possible from quotes. Still, there is always the possibility of a mentor 27 recognizing what they believe to be their own story. 28

We have tried to avoid passing judgment on the stories, including not seeing one way of developing as a mentor better than others. Nor has our focus been to conclude about the mentors' success. During our research, we were aware of the risk that some mentors might have differing views on how we interpret their narrative. However, as a socio-constructivist study, the narratives we present are the results of our analysis of texts of mentors' narratives and should be read as that. At best, we present part of the study participants identities ²⁵.

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1	2.6 Reflexivity			
2	We tried to be aware of what we, as researchers, brought to the research, be that our ontological			
3	position, theoretical and methodological assumptions, and awareness of our interaction with the			
4	research objects. This relates to how we framed our thinking, positionality, and took ourselves			
5	into the research process ^{26, 27} . Positionality refers to the "examination of place, biography, self			
6	and other to understand how they shape the analytic exercise" ²⁸ . In this, we sought to establish			
7	"ways of seeing which act back on and reflect existing ways of seeing" 29.			
8				
9	Our research group represents a variety of competencies and lenses for observation and			
10	analysis, respectively having medical (EAV, ES, EHO) or educational (LH, TS, MK) training,			
11	with a range of experience from doing educational development, teaching medical students and			
12	faculty, and doing research focused within medical education on identity formation, threshold			
13	concepts framework and liminality, affective dimensions, and mentoring.			
14				
15	We divided the research team into two groups: the main group (EAV, LMH, MK) was hands-on			
16	with the data, while the co-researchers (ES, EHO, TS) participated in discussions about			
17	tentative interpretations of the data. The co-researchers focused on questioning the findings and			
18	their meaning, discussing implications and relevance, and suggesting ways to move forward.			
19	This structure aimed to ensure that we could hold different perspectives salient throughout our			
20	work with the article.			
21				
22	3. Results			
23	In the following, we present excerpts of four narratives, each telling a story about a mentor's			
24	journey. The narratives are complex, internally overlapping, dynamic, convey unconscious			
25	thoughts and ideas, and can contain contradictions and inconsistencies. We present the			
26	narratives with orientation around three components: negotiation of liminality, narrative			
27	coherence, and dialogues between identities.			
28				
29	Mentors from all universities are represented in the following narratives. Some characteristics			
30	are disclosed in the narratives when relevant, while others are withheld to protect their			
31	identities. To help present the narratives and how they compare, we have created a condensed			
32	summary at the end of the results section (see Table 2).			
33				
34	Fred's narrative – narrative coherence			
35	Even with only a few years of experience as a mentor, Fred enjoys it. He sees mentoring as a			
36	way of helping students with what he refers to as the "non-knowledge medicine"; helping them			

develop "soft skills" and accompanying them through all their "concerns and issues" as 1 2 students. 3 4 As Fred interacts with the students, he gets new insights, even about himself: 5 6 You remember yourself now, but you don't remember your past self a lot. And the 7 mentees actually helped me remember my past self... My hopes, my fears, what I 8 thought, what I wanted to be, etc. 9 10 This newfound awareness of how he himself became who he is today helps him see that the 11 students will grow, as he has and continuously will do. Fred is sensitive to students' reactions, 12 allowing himself to feel the unpleasantness of being fallible. By daring to feel and reflect on 13 what is uncomfortable, he can learn from situations: 14 15 I was telling them I became a specialist because I liked (...) care and this and that.... 16 And I said "you know what, at the same time I'm going to be honest with you; I'm not 17 gonna mind doing two extra years to be paid two times more". It was a very candid 18 remark, but you cannot imagine how much I regret it, saying that to people who just 19 started medical school! How stupid were you to say something like that! 20 21 Here Fred enters liminality willingly. He could have rejected reflecting on the situation, by 22 underplaying the effect and importance of what he said. Instead, he dares to feel uncertain and 23 uncomfortable, putting himself consciously in a position to learn. He is unlikely to say such a 24 thing to medical students again. Meanwhile, he is protective, not wanting such cynical 25 statements to influence the students. 26 27 Throughout the interview, Fred tells a coherent narrative. He seems untroubled by being a 28 mentor alongside being a physician, seeing his mentor and physician identities as connected. 29 Therefore, he can take learning from one arena to the other, making his physician capabilities 30 useful as a mentor, and vice versa. The coherence is also displayed in his dialogue with his 31 surroundings as he tells his story, not shifting between positions or identities that contrast each 32 other.

2	Dan is an experienced physician having several years of experience as a mentor. He understands				
3	his own identity as being formed through sociocultural interaction. Role models and culture				
4	have influenced him, and he has lived through a change in culture from one way of				
5	understanding to a new understanding. As a mentor, his "driving force was to be able to give				
6	back" to this collective:				
7					
8	I was coming out of the old culture where if something wrong happened it was your				
9	fault. Because you weren't good enough. Because you hadn't learned. Because you				
10	were a bad doctor () And so, I was, I lived that changing culture where this group of				
11	internist I guess I can say that that culture has modelled me also, I actually saw that				
12	in action, so, I guess role modelling also can be from a collective, from a culture.				
13					
14	His high tolerance for uncertainty and his tendency to search internally for what he can do				
15	differently helps him tolerate liminality until he has learned.				
16					
17	So, clearly, I said that there is something here and just because I don't understand it				
18	[the mentoring program], I, I am going through one cycle [of mentoring] and we will				
19	see.				
20					
21	For Dan, to live is to learn and grow continuously. He does not have to seek liminality; he is in				
22	it continuously through his reflexive way of being.				
23					
24	() you are not even quite sure what the conclusion will be, and it doesn't matter, but				
25	you have the confidence that the encounter will create something. And that goes with				
26	patients too. It is not unique to an encounter with students.				
27					
28	Dan has developed faith in the value of being with the students and their capability of making				
29	the mentor meetings valuable by sharing what they think, believe and experience.				
30					
31	Like Fred, he tells a coherent narrative, displaying a broad understanding of medicine which				
32	includes being a mentor. He is in one consistent dialogue with his surroundings, as his identities				
33	are connected.				
34					

Dan's narrative – embracing liminality

1	lan's narrative – conflicting identities				
2	Ian is an experienced physician who struggles with being a mentor, as he feels he has "very little				
3	to contribute with". He is unaware of his own processes of professional identity formation and				
4	does not see that he can develop further as a mentor to help students form their identity. Ian				
5	considers the problems he experiences as external to him, characteristic of the mentoring				
6	program, which he thinks should try to prepare students for the "coming disaster" of working				
7	life and not on "all those soft areas". Even though he claims to not having mastered the				
8	mentoring role, he actively avoids courses that might help him.				
9					
10	No, they [the mentor program] have such a course in the beginning, which I then did				
11	not participate in because I was still trying to get away. () I got those papers and				
12	slides, it's just wishy-washy and blah blah as I'm very happy that I missed it, at least,				
13	that introductory course. I can't do that! All that education here. It's not the way I wan				
14	it to be, really.				
15					
16	He does not want to move, rejecting liminality when he becomes conscious of it. Throughout				
17	his narrative, he manifests explicit resistance to changing and evolving of the world. Still, there				
18	are signs that he has unwarily and unconsciously entered liminality by how he tells his				
19	narrative:				
20					
21	Ok, it's zero reward [from mentoring]. There is no reward. It's just stress. There is no				
22	joy, that way. () Yes, I'm not saying I'm not having fun, but it's just because of her				
23	[co-mentor]. Yes? Not bec and the group is fun. It's fun to see these younger students				
24	and how eager they are and idealistic they are and such. Yes Then you also know				
25	that time hurts all doctors in the end, so				
26					
27	When Ian unconsciously steps into different identities that are in tension with each other, the				
28	accompanying dialogues render the narrative seemingly incoherent. These narrative				
29	contradictions are likely from parts of the story being hidden from himself.				
30					
31	The multiple dialogues show Ian's struggle in liminality. Depending on which identity he is in				
32	dialogue with, he can take conflicting stances without realizing it. Mentoring gives him no				
33	reward as long as he is in dialogue with himself as a colleague who is very pessimistic about the				
34	mentoring program. But talking from the identity of a co-mentor, he tells how much he enjoys				

being a mentor. Moving back and forth like this in understanding is typical of being in

- 1 liminality. Although he seeks to reject learning, he is in a liminal space where learning can
- 2 happen. Importantly, this conflict generates powerful, difficult emotions for Ian. For instance,
- 3 he is frustrated and angered by feeling "pretty stupid" as a mentor. He also displays shame for
- 4 being a mentor, hiding his educational responsibility for colleagues.

6 Vera's narrative – dodging liminality

- 7 While having been a mentor for only a few years, Vera has decades of experience as an
- 8 educator. She is aware that she is known for being honest and direct a personal characteristic
- 9 that she takes pride in, although it has given her "many nose stiffeners along the way". While
- she cares for students, she struggles to grasp what the mentor role expects of her. She says:

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12 A mentor is someone that people know who are, I think almost every student at our 13 faculty knows who I am. They know my pros and cons, I think. They know that I mean

well. But mentoring a group of eight student, I have struggled big time with doing that.

15 [...] Well, I am thinking, up to 10 % of medical students have a problem. And you need

to identify who they are in a good way and help them. So, the group that I have

mentored haven't had that. They have all been wonderful people without problems; they

talk and share and are very engaged in our meeting. [...] But they don't have any

19 problems. [...] So I don't feel I have been... or had much value for that group.

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While she finds it challenging to understand how she can help her students, Vera tends to give

up on finding out how she can be of value. For her, there needs to be a problem to fix. When

asked how she learned about teaching, she replies:

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I have never learned it. I have never taken any courses in how to teach, never did anything. I am very self-taught. I think that works too. [...] I have actively avoided it. I

use myself as a reference for what works and what doesn't work.

28

29 The statement that she has "actively avoided" courses on how to teach indicates that she is

30 likely to refrain from liminality. It also connects with how she, in her view, always has been the

31 way she is. She does not seek to change; she avoids such identity formation when possible.

32 Accordingly, her suggestion for changing the mentoring program is to "abolish it". Her

struggles as a mentor are external to her; they are due to the mentoring program's design,

instructions, and goals.

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- 1 Vera's narrative becomes incoherent as she tries to be in dialogue with several of her identities
- 2 simultaneously. As she tells her story contradictions to her portrayed identity of being "self-
- 3 taught" become visible. While denying that she ever had any role models, she tells of being
- 4 influenced by others. While portraying herself as always going her way, she also tells stories of
- 5 a different Vera in the past who complied with the norms and social culture of medical school.
- 6 She is not consciously aware of her own identity formation.

- **8** 4. Discussion
- 9 We have presented four narratives of different approaches to liminality while becoming and
- being a mentor. During our analysis, we identified three components of the narratives that
- enriched our understanding of becoming and being a mentor: negotiation of liminality, narrative
- coherence, and dialogues between identities.

13

- 14 The mentors presented in this study have different ways of negotiating liminality. Fred
- consciously seeks liminality and the potential for learning, while Dan thrives in liminality,
- unconsciously experiencing it as a way of being. On the other hand, Vera actively avoids
- 17 liminality, while Ian wants to reject liminality but does not necessarily recognize it. He seems to
- wander into liminality unconsciously and struggle while being there. As he does not necessarily
- understand what is happening to him, his retraction from liminality is delayed. While it is likely
- that Vera will remain in her current understanding, Dan and Fred are likely to reach new
- 21 understandings continuously as they develop. It is unclear how Ian's learning journey will be.
- He might stay with his current understandings, but he may also reach new insights as he
- unknowingly takes "messy journeys, back, forth and across conceptual terrain" ³⁰.

24

- There seems to be a link between mentors struggling with taking on the mentor role and being
- unaware of their professional identity formation, claiming always to have been like they were
- and denying any role models. These mentors proclaimed that their struggles were due to the
- 28 mentoring program's structure, not something within their control. In contrast, those mentors
- that were aware of how their own identity had formed as part of a culture focused on what they
- 30 could do differently to succeed as a mentor. This resonates with previous research, which has
- 31 indicated that mentors need to be prompted into thinking about how their own identity has been
- formed to be able to help their mentees better ³¹.

- A desire to avoid liminality can come from focusing on increasing own comfort, confidence,
- and efficiency ³². With that focus, it is rational not to want to enter liminality and potential for

experiencing discomfort, confusion, and frustration while trying to reach a new understanding.
It can be more comfortable and easier to employ known solutions to fix their struggle with
being a mentor than to find new ways of being and doing ³³.

Focusing on their dialogues, we found that some mentors were in a 'dialogical struggle' between different selves ³⁴. This struggle is most salient in Ian's story, where the hidden dialogues with multiple identities give the narrative several internal contradictions. This finding shows some of the struggles of integrating different identities. The hidden dialogues reflect how they stage themselves for others, changing their presentation of self between the "stages" they enter ³⁵. As they move between different stages, inconsistency enters the narrative. As they try to please several audiences simultaneously, it becomes visible that they have other identities and layers at stake than what they try to show. Contrastingly, Fred and Dan tell coherent stories without diverging dialogues. Those with a mentor identity integrated with their other identities can tell one coherent story of themselves to all their dialogue partners. With greater integration between their identities, they need only one stage.

Those struggling with integrating their mentor identity with other identities, like Vera and Ian, may experience themselves as inauthentic mentors, not enacting their true selves ³⁶. Previously it has been suggested that a connection between personal values and the work as a medical educator is helpful for the individual to invest in integrating identities ¹. In this study, we strengthen that argument as we find that tension between identities can stem from mentors understanding of medicine. The mentors who find the humanistic and emotional aspects of practicing medicine vital seem to have an easier task connecting their identities. They can "stand in the spaces between realities without losing any of them", with "capacity to feel like one self while being many" ³⁷. In contrast, if mentors have an understanding of medicine in which the medical humanities are deemed peripheral, other goals might become more central, making it harder to integrate a mentor's identity with other identities.

This study has implications for the practice of faculty developers who support clinicians that teach. They should be aware that those seeking faculty development initiatives are likely to accept and welcome liminality, perhaps seeing it as an unavoidable affordance as they grow and develop as professionals ³⁸. Others avoid these initiatives, maybe interpreting liminality as a sign of failure and rejecting the integration of a mentor identity. Some are not yet ready to become a mentor and occupy liminality while being "betwixt and between" their previous and new understanding of self ³⁹. In our study, the sociocultural surroundings influence some

1 mentors to the extent that we question if it rarely will be productive to target them individually 2 in the hope of helping them develop. We suggest that faculty developers focus on context, as the 3 contradicting dialogues show the importance of the professional environment for determining 4 which strategies clinicians that teach resort to when facing liminality. For instance, faculty 5 developers can focus on creating a culture where mentoring is deemed valuable and central for all doctors ³. If that helps clinicians expect and tolerate liminality, they may be rewarded with 6 7 learning "journeys" in unexpected landscapes, possibly becoming a self-reinforcing spiral, 8 increasing their ability to search for new solutions. 9 10 There are potential limitations to the study. The selection of four narratives for deeper analysis 11 could have been done in multiple ways, which would have yielded different analyses and shed 12 light on different aspects of becoming and being a mentor. Any narrative can only partially 13 portray the richness of the complete material. While our choices are in concurrence with the 14 DNA method, we recognize that further analyses could expand the dialogue ¹⁸. In addition, this 15 study was conducted in two countries, with three different contexts and two languages. While 16 there are cultural similarities, there are also differences that may have impacted mentors' 17 narratives. Future studies may investigate how individual and contextual variables can 18 contribute to being a successful mentor. 19 20 5. Conclusions 21 Liminality is an uncomfortable, ambiguous, but often inherent and necessary aspect of learning 22 and adapting to new roles. Mentors who have not integrated a mentor identity with their other 23 identities, may experience themselves as inauthentic, with feelings of discomfort, confusion and 24 insufficiency while becoming a mentor. They might want to avoid this liminal experience, thus 25 reducing their chances to integrate identities and render their narratives coherent. Cultivating a 26 culture supportive of mentoring in medicine, may help these physicians develop internal 27 dialogues that may reconcile their clinician and mentor identities, making them more likely to 28 embrace liminality and grow as mentors. 29 30 Author contributions 31 ES, EHO, TS, MK planned the initial study and collected data. EAV, LMH, MK outlined the 32 paper, its research focus gravitating around liminality, and analyzed data. EAV wrote the first 33 draft of the paper, with parts written by LMH and MK. All authors participated in discussing 34 results, and approved the final version for publication, agreeing to be accountable for all aspects

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of the work.

- **2** Ethics statement
- 3 Ethical and data protection approval was given by the Norwegian Centre for Research Data (ID
- 4 53715) and the McGill Institutional Review Board (Study number A03-B16-17B) in 2017.

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Table 1. Interviewees sorted by university location, gender, and mentoring experience.

	Montreal	Bergen	Tromsø	Total
Number of interviewees	7	8	7	22
Female	2	5	3	10
Age <49	5	3	2	10
Age 50+	2	5	5	12
Mentoring experience <5 years	5	7	4	16
Mentoring experience >5 years	2	1	3	6

Table 2. A condensed summary of the results.

	Narrative coherence	Dialogues	Negotiation of liminality
Fred	Coherent	One dialogue	Consciously seeking
Dan	Coherent	One dialogue	Unconsciously thriving
Ian	Incoherent	Many hidden dialogues	Unconsciously enter
Vera	Incoherent	Some hidden dialogues	Consciously avoiding

Placement of the Tables

- Table 1 is referred to at p.3, line 23.
- Table 2 is referred to at p.6, line 32. If the article is accepted, we ask that Table 2 is placed at the end of the "Results", even though we refer to it in the start of the "Results" section. Our reasoning is that we believe that will be most helpful for the readers of the article, as having read the narratives in the results helps understand the table.