WHEN BREATH BECOMES AIR

PAUL KALANITHI

FOREWORD BY ABRAHAM VERGHESE
Table of Contents

Discussion Questions 3

Inside A Doctor's Mind At The End Of His Life 5

Behind 'When Breath Becomes Air': Exclusive Interview with Lucy Kalanithi 8
Discussion Questions

1. How would you describe Dr. Paul Kalanithi? What kind of a person was he?

2. One of the most profound questions addressed in this book is what makes life worth living in the face of death. We all face death, but Paul Kalanithi knew his was imminent. What answers, or at least consolations, does he find?

3. Kalanithi quotes Samuel Beckett's seven words: I can't go on. I'll go on." Talk about what that means, not just for Paul Kalanithi but for all of us. In the face of dying, especially prolonged, how does one "go on" or, in popular parlance, "keep on keeping on"?

4. One of the ironies of Kalanithi's life is that he postponed learning how to live in order to learn how to be a doctor. But once he knew he had lung cancer, he had to learn how to die. What are the ways in which he learned to live...and learned to face his death? Would you be as brave and thoughtful as Katanithi was?

5. Describe Kalanithi's love-hate relationship with medicine. He saw it as a job that kept his cardiologist father away from home. But how else did he see it?

6. What kind of a doctor was Kalanithi? Why was he, even at a young age, able to understand the needs of his patients more than so many other young doctors?

7. Kalanithi said that he acted in caring for his patients as "death's ambassador." "Those burdens, he wrote, "are what makes medicine holy and wholly impossible." What does he mean?

8. Once Kalanithi and his wife learned that he had terminal cancer, why did they decide to have a child? Even Kalanithi wonders if having a child wouldn't make it harder to die. What would you do?

9. How would you (or will you) go about dying? How do you think of death—as something distant, something frightening or horrible, as part of the normal spectrum of life, as a closing of this chapter of your life and the opening of another? What comes to mind when you think of your own demise?

10. Do you find When Breath Becomes Air enlightening, insightful, spiritual, maudlin? Would you describe it as an important book or merely interesting?

Discussion Questions: When Breath Becomes Air


2. What did you think of Paul’s exploration of the relationship between science and faith? As Paul wrote, “Science may provide the most useful way to organize empirical, reproducible data, but its power to do so is predicated on its inability to grasp the most central aspects of human life: hope, fear, love, hate, beauty, envy, honor, weakness, striving, suffering, virtue. Between these core passions and scientific theory, there will always be a gap. No system of thought can contain the fullness of human experience.” Do you agree?

3. How do you think the years Paul spent, tending to patients and training to be a neurosurgeon, affected the outlook he had on his own illness? When Paul wrote that the question he asked himself was not “why me,” but “why not me,” how did that strike you? Could you relate to it?

4. Paul had a strong background in the humanities, and read widely throughout his life. Only after getting a Master’s in English Literature did he decide that medicine was the right path for him. Do you think this made him a better doctor? A different kind of doctor? If so, how? How has reading influenced your life?

5. What did you think of Paul and Lucy’s decision to have a child, in the face of his illness? When Lucy asked him if he worried that having a child would make his death more painful, and Paul responded, “Wouldn’t it be great if it did,” how did that strike you? Do you agree that life should not be about avoiding suffering, but about creating meaning?

6. Were there passages or sentences that struck you as particularly profound or moving?

7. Given that Paul died before the book was finished, what are some of the questions you would have wanted to ask him if he were still here today?

8. Paul was determined to face death with integrity, and through his book, demystify it for people. Do you think he succeeded?

9. In Lucy’s epilogue, she writes that “what happened to Paul was tragic, but he was not a tragedy.” Did you come away feeling the same way?

10. Lucy also writes that, in some ways, Paul’s illness brought them closer – that she FELL feel even more deeply in love with the “beautiful, focused man” he became in the last year of his life. Did you find yourself seeing how that could happen?


12. Is this a book you will continue thinking about, now that you are done? Do you find it having an impact on the way you go about your days?

http://www.randomhouse.com/rhpg/rc/2016/02/08/discussion-questions-when-breath-becomes-air
Inside A Doctor’s Mind At The End Of His Life

February 12, 2016

DAVID GREENE, HOST:

Dr. Paul Kalanithi was 36 years old in the final stretch of his seven-year medical residency when he looked at a CT scan, something he’d done with countless patients. But this time, the scan was his.

LUCY KALANITHI: The lungs were matted with innumerable tumors, the spine deformed, a full lobe of the liver obliterated, cancer, widely disseminated.

GREENE: Kalanithi had stage 4 lung cancer. That diagnosis came in May of 2013. He’d have less than two years left. In that time, he would continue to care for patients while he still had the strength, he’d have a baby with his beloved wife, and he would write a book. "When Breath Becomes Air" is his meditation on being a doctor and a patient, one facing life-changing news.

His story has resonated with so many people. And now his wife, Dr. Lucy Kalanithi, finds herself on a book tour for her late husband.

KALANITHI: It's really kind of a bittersweet process as you can imagine, quite bitter and also quite sweet. Paul died nearly 11 months ago, but being able to talk about how I feel and remember Paul is very healing for me, so it's actually kind of wonderful at the same time.

GREENE: Listen to Lucy Kalanithi speak, read her husband's book, and the extraordinary human being Dr. Paul Kalanithi was takes shape. He loved literature and philosophy, but he was also drawn to medicine's most demanding specialty, neurosurgery, because he want to guide patients through life's toughest questions.

KALANITHI: Would you trade your ability to speak for another five months of life, or what type of neurologic devastation would make it more reasonable to stop living than to be alive? And these are not theoretical questions in the neurosurgical context. They're very real, very difficult choices that patients face, especially in neurosurgery where your brain is an organ just like your other organs, but it's what forms your identity.

GREENE: Well, the kind of moment you're describing was devastating to read about, him hitting such a moment when his own cancer was spreading to his brain and having a neurological impact.

KALANITHI: Yeah, that was very hard. This whole second half of the book is about Paul thinking about how to grapple, in a very real way, with his own mortality. And then when he was diagnosed with a form of metastatic brain cancer called leptomeningeal disease, which - this sounds really stark, but it's essentially like tumors are sort of coating your brain and your spinal cord, and it also holds the prospect of seizures or trouble speaking, trouble thinking. So it was so intense on top of everything else to get this diagnosis that meant that his ability to participate in all the things that was bringing him meaning, particularly writing this book and being together with our daughter and our family, was really devastating.
GREENE: But you bring up a person who seemed to bring such joy to the final months of his life, and that's your daughter...

KALANITHI: Yup.

GREENE: ...Elizabeth Acadia Kalanithi, right?

KALANITHI: Oh, man, yeah, she was - she is just perfect. He loved her so much, and he was just thrilled to be a dad, and just the fact of having this infant just breathed this unbelievable life into our house. He was the one who initially had the strong instinct to have a child despite his illness. I really kind of needed to think about it even though it was something we had always hoped to do. I knew that I would be taking on, you know, the responsibility of being a caregiver to both of them and then likely the responsibility of raising her without Paul. And I said to Paul, you know, don't you think that saying goodbye to a child would make your death more painful? And he said, wouldn't it be great if it did? And what he meant by that was the joy and meaning of having a new family member is so great that wouldn't it be great if that made it even more painful?

GREENE: Did you ever get this feeling, just given his interest in our relationship as humans with death, the value of our life, that in some weird way, as devastating as this must have been for you and your family, like that he was made to have this experience and to be able to help us all through this journey?

KALANITHI: Yeah, it's sort of bringing tears my eyes to hear you ask that because he makes this joke in the book where he says something like, well, wouldn't a terminal illness be the perfect gift to this young man who hoped to grasp mortality in a kind of intellectual sense? Those questions became not at all theoretical. Paul really had to draw on all these things that he had been kind of developing his whole life. He really returned to literature to cope. He fell back on his training as a physician. So I know exactly what you're getting at, which was what a funny confluence of factors that would prepare a young person to face this in a particular way despite looking at the fiery light of illness in real time.

GREENE: Well, why does that bring tears to your eyes asking that question?

KALANITHI: Mainly because I feel so proud of Paul, and I think he did such a good job coping and making sense of things and writing this book, which, you know, is partly a journal of his experience, but it's really written to help other people see that path that he went down and, like you say, find some value for themselves in his singular experience but also the fact that it's really a universal experience. We'll all face illness and death. And then I guess it helps me understand and see that Paul does have a legacy, you know. It's something that people are responding to and holding onto. And so that's sort of, you know, what a legacy is, is that it carries forward without you. And so it's wonderful to see that Paul has that.

GREENE: How tough is it to remain so composed in having conversations like this?

KALANITHI: I don't even the answer to that. You know, it's interesting because I kind of have been thinking, you know, if I had to go on NPR and talk about some professional topic or something else, I think I would be much more nervous than I am talking to you today, and I think
it's because the only thing I feel like I need to be doing is describing what happened, what's happening. And so it's turning out to feel pretty natural to talk about these things in a real way. And then at the same time, the challenge or the other piece of my own life is that I'm returning to my career. I'm learning to be a mom. There's working on this book and kind of carrying Paul forward but in a way also sort of molting the marriage and learning to move on. So it's sort of a mixture of composure and disorientation, and I have a lot of support to be coping with all of it. It's not easy every day, I'll say that.

GREENE: Thank you. And the book was truly, truly powerful and that - just thanks so much for taking the time to talk about it.

KALANITHI: Thank you so much.

GREENE: That's Dr. Lucy Kalanithi. Her husband's book is "When Breath Becomes Air." Dr. Paul Kalanithi died in March of last year.

Copyright © 2016 NPR. All rights reserved. Visit our website terms of use and permissions pages at www.npr.org for further information.

Behind 'When Breath Becomes Air': Exclusive Interview with Lucy Kalanithi

The widow of author Paul Kalanithi talks love, loss and literature

*Book of the Month, Lucy Kalanithi*

February 01, 2016

Judge Kim Hubbard told us that her February Book of the Month selection is her favorite pick to date. Written by Paul Kalanithi after he was diagnosed with Stage IV lung cancer, the Stanford neurosurgeon, who also has a Masters in English Literature, examines some of life’s most important questions: What do we do with the time we have left and how do we live meaningfully? Some of his answers included spending time with his wife Lucy, and having a daughter named Cady. Lucy wrote the Epilogue to Paul’s memoir after he passed away in March 2015, and has recently been busy sharing Paul’s words with the world. We spoke with her in a 30 minute interview.

Check out the full audio interview here or read the full transcript below:

I read this book it was beautiful and hard to keep a dry eye - what has the whole process been like for you? Finishing the book, dealing with his death at the same time as raising your daughter. Can you update us on your life and how you’ve been dealing with all of this?

Yeah I sort of don’t even know where to start. It’s obviously totally surreal, especially now that the book has come out, it’s like this mixing of private, personal, with public. As an example, I haven’t been to Paul’s grave in a week or two because I’ve been so busy with the book promotion, it’s sort of like the good news and the bad news, you know. But it’s been really wonderful and kind of a consolation for me - it was so important for me to complete it and carry it forward because Paul had worked so hard on it and I felt like he really had important things to say in drawing in his experiences, not only as a terminally ill person, but also drawing on his background in medicine and then literature and philosophy. I am so proud of him, that it was
really wonderful to do this for him - finish it. Make sure it happened, that what he was trying to do happened. Then also feel connected to him still through that process.

You talked about this a little in the book but what was your reaction when Paul first decided he wanted to document this experience? Obviously he was passionate about writing - but it's such a personal experience for you and your family. Were you hesitant at all in the beginning?
About him writing a memoir?

Yeah.
I would say not hesitant, although like a little bit surprised and interested in how he was making those choices. The first thing he wrote was a personal essay, almost like a journal entry, that ended up being that piece, ‘How Long Have I Got Left?’ in the New York Times. He got this really immediate gratifying response to that where he suddenly was connected to other patients, or doctors, or others who responded to the themes in that piece. It was interesting because he said you know, this is such a personal story, he was almost surprised it resonated with other people and then it sort of became obvious, in the singular experience, people can see themselves and connect to each other through stories. The fact that he had always wanted to be a writer and then had this initial positive experience writing something public that led him to do that.
He was quite a private person, or he could be a private person, so it was actually interesting to see him want to be public with such a personal experience facing illness. He did start writing and then he did a couple of public interviews, like including an interview on stage at Stanford speaking with a Palliative care physician about his experience. It sort of became obvious why he would want to share that and stay connected through this purpose. I almost was surprised by how deeply authentic and detailed he was in describing his personal experience. Because he really didn't spare himself or anybody else anything. When he was writing the book, he writes about his own failures, and he just writes really starkly in some ways. But I actually think part of the reason people seem to be responding to the book is how authentic it is. So it kind of surprised me a little bit, but then now in retrospect it really makes sense to me. I wrote this piece recently in the New York Times called ‘My Marriage Didn't End When I Became a Widow’ and I don't think I ever would have done that had it not been for Paul’s paving the way and then realizing how consoling it is to connect with people.
I also thought about our own experiences reading, Paul read so much poetry and literature about facing mortality. It was so helpful to him. He left this book behind, so to speak, a friend of his had given him this book 'Lament For a Son.' It's by this guy Nick Wolterstorff who was a Professor at Yale who lost his son in a mountain climbing accident when his son was 25. Nick Wolterstorff wrote this tiny little volume called 'Lament For a Son,' it's super mournful and just really stark and personal and Paul read it and loved it and before he died he said "can you give this to my parents when I die?" It was very helpful for his parents. It includes all these beautiful ideas - like the idea of owning your grief, not trying to suppress your grief, or he says this beautiful thing, where he says, "every lament is a love song." It talks about how grief is the flip side of love, the deeper your grief, the deeper your love. That's another example of this really singular experience that Dr. Wolterstorff writes about but then you realize how consoling and fortifying it is in your own life. I think Paul aims to do that same thing. He was writing for himself but he was definitely writing for readers and taking them into this personal experience that in a way then illustrates the universal and makes people feel connected, the more personal it actually is.

That brings me to what you were speaking about - the role of literature and how that consoled him and helped him - Sam Beckett's "I can't go on. I'll go on." Do you have any pieces of literature that you turn to now? I read an interview with Paul saying he was so fascinated by you when you guys first meet because you had a bookshelf full of books but that you didn’t like to read.

I was sort of laughing. He sort of outed me for something which was like, half of those books were books I acquired and wanted to read and half those books are books I love. He thought it was hilarious. He was like, "What did you think of this book?" and I was like "I haven't read it yet," And he was like "What! Why is it on your bookshelf?" I actually think you're allowed to do that too.

Especially since he died - we had very different tastes in literature. I actually considered myself a reader just not compared to Paul, Paul was just like unbelievably connected to books and just had like - he never could throw away a book. His parents still have like 22 boxes of books at their house in Arizona because Paul never ever rid himself of a book, ever. I'm a reader, just not to that extreme degree. I kind of like recent, non-fiction, which is different from Paul liking English literature, as far back as it goes. Poetry has been really helpful for me since Paul died. There are all these beautiful poems. I really love, "Surprised by Joy," which is this [William]
Wordsworth poem about the experience of grief, and then I love this other poem called, "Last Night the Rain Spoke To Me," I think it's a Mary Oliver poem. It's sort of about the idea of going forward and the last line is something like, "Oh the long and wondrous journeys still to be ours." And it makes me think of me and Cady. It's kind of like this turning forward and remaining in the moment.

There's another poem called, "Elegy to Philip Sidney," which is by Greville, who's a poet, whose poem Paul drew the epigraph in the title for his book from. This other poem, "Elegy to Philip Sidney," is like 600 years old and it's about Greville losing his best friend, Philip Sidney, and it's so, so, so heartbreaking. There are a couple of lines that really make me think of Paul. The last few lines say - talking about going to a grave - and it says something like "Salute the stones that keep the limbs that held so good a mind." It's just this heartbreaking thing that's kind of like a tribute, and a lament, and it makes me think of Paul. There's also another line in that poem that says "Death slew not him, but he made death his ladder to the skies." I can barely say it without crying. It's sort of like...I really like the idea of, there's the battle metaphor for cancer. Which often works, but not for terminal cancer.

There was a headline after Paul died, his death got covered in a few local news pieces. One of them said, "Stanford Neurosurgeon Succumbs to Cancer." I was like, I don't think Paul succumbed. He died, but I don't think he succumbed. That theme shows up in literature. So do a lot of others. Poetry has been very helpful. I've read, 'The Year of Magical Thinking,' before, and I keep thinking I should go back and read it. I read C.S. Lewis' terrible book on grief, I mean terrible because it's so heartbreaking. It's almost too painful to read, he's so pained that I almost couldn't do it. It just depends what strikes you. I have been reading a lot since Paul died.

That brings me to my next question which is from Kim Hubbard, who selected your book, she's the books editor at People Magazine. She said that she was floored by your writing and thought you were such a beautiful writer yourself. Do you have plans to write your own book? No. I've learned, since, learning more about publishing and writing, that writers don't have to love writing. I think Paul actually loved writing, he enjoyed the actual process of writing. Even though it was hard work. For me writing feels a little more like pulling teeth. With that New York Times piece ultimately it feels like my heart is on that page. I feel so good about what's written there but the process - it takes me a very long time. I need a lot of help with it. It's easier for me to talk than to write. I think, I'm more of a talker than a writer, so I'll have to figure out what to do with that.

Fair enough. I wanted to ask about something you said in the Epilogue about thinking the only thing really missing from the book was Paul's sense of humor. I'm curious about that. Can you tell us more about it to get a better sense of who Paul was?
Yeah. It's funny because I did an interview with Katie Couric last week, her piece just came out on Yahoo News and it's like this 9-minute news piece. And at the beginning she let me talk about how Paul was really funny. I don't know if you can link to it - but it definitely gives people an example. I talk at the beginning - there's these pictures of him being sweet and goofy and then I talk about this little detail, which was, when we were in medical school he had been a sketch comedian in college and he was an extremely talented comedy writer. I say in this Katie Couric thing and they even show a photo where Paul had a fake mustache in his Yale Medical School ID for four years. He had thrown it on at the beginning of med school out of his pocket he put the mustache on right before they took the ID photo. I think for him it was almost like this anodyne...at the time he thought he would enter medical school and then become too serious. I think it was like almost a challenge to himself, to retain himself.

The book is really serious, and it's written by a dying person, and it draws on the deepness of Paul's intellectual self. But then he was super, super funny and even his friends who read the book will say like "Oh it's not funny enough." But it's like, that's not who Paul aspired to be as a writer in the world. He just was so cute and snuggly and funny. It's funny because, I read this interview a long time ago, there's this psychologist at Harvard called Dan Gilbert. He's talking about his best friend who died whose another psychologist named Dan Wegner and he says this thing: "Humor is the place where intelligence and joy meet." And it's like, it was this lovely thing to say about his friend, and I loved it because I think the same thing about Paul. He was super funny and it was that same kind of idea, he was observant, and joyful and it came out in this other way too.

I love that.

Can you give us an update on your daughter? How is she doing?
She's 18 months. She's doing great. It's really funny because she just doesn't know what's happening. She loved Paul, and then Paul died, and she wasn't really aware, and now the book's coming out, and she doesn't know...When Paul was alive, he wasn't a famous writer, and then now it appears that he's a famous writer, so it'll be interesting to see what kind of relationship she develops with him and his legacy at various stages in her life. She's a really sweet kid and she really looks like a mix of me and Paul. I'm sure it's easy for me to notice things in her that seem similar to Paul, but it's like, she's got these kind of fiery, dark eyes and she's unflappable and she's really funny and she loves books. There are pieces of her that remind me of Paul. At the same time, she's not replacing Paul. She's her own person, and now that she's starting to talk and be willful, I feel like I'm getting to know her. She's turning from an
infant into a little person. She's doing great, she's really thriving. We have a really wonderful community and family, and so I feel like even though Paul's not here, I feel really happy about all the support that she has and that I have.

To that point, how are you juggling all the press for the book and then being a doctor, and having a family?
Well thankfully I work at a really amazing Institute at Stanford that thinks about healthcare value. I've worked there first as a Postdoctoral Fellow and then now as a Junior Faculty Member, ever since Paul got sick. It's a really humane place to work and they've been really supportive of me and Paul and our family and let me have a flexible schedule and then now I still have a flexible schedule to be able to do this work on Paul's book and then I'm ramping up my commitment to them again. So thankfully I'm not juggling too many things at once, and then I have a lot of help taking care of Cady, even though I've been on this leave from work, especially now with publicity, been working on behalf of Paul kind of full-time on the book, so that's gone up and down, but I have a lot of help balancing it.

It's all kind of a joy. Cady's amazing and the book - I'm really glad that the book is happening for Paul and I'm really glad that I got to work on it. I raised this a little bit in the New York Times piece, the idea of carrying something forward for Paul but also kind of molting Paul at the same time. I think this is like a way to stay connected to Paul but then also stretch me into the future.

Yeah, that's great. Besides getting to know Paul, what do you want Book of the Month readers, or any readers really, to take away from this book?
I guess, I'm really grateful. I want to express gratitude that people are reading it. And it's amazing that it's being featured by you guys, and Paul dreamed of becoming a writer, and it's really amazing. Then I guess, one of the things that's been gratifying, or that I think the book has the potential to do is help people reflect on their own situations. Whether that's their own illness, or their mortality, or their choices, or sick or aging family members, I think it's an opportunity to start personal conversations. I think illness and death are really hard to talk about, but I think this book sort of is a little piece of this larger opportunity for us to be talking to each
other in a realistic way about our healthcare and our lives and our ability to take care of each other and the resources we need to be able to do that in our communities and in our families. So I think that, insofar as I picture discussions that come out of this book, I think they are actually not necessarily going to be about Paul, I think they're going to be about the readers own lives. I think - I’m really proud of Paul for being able to be kind of like a springboard for people to then bring up important things in their own lives or in their family.

When Breath Becomes Air: Dr Lucy Kalanithi Discusses the Story Behind the NYT Bestseller

July 11, 2016

Editor's Note:
When neurosurgeon Paul Kalanithi passed away at age 37 from metastatic lung cancer on March 9, 2015, he left behind an unfinished manuscript with notes to his wife Lucy about publishing the text. Published posthumously, When Breath Becomes Air immediately became a national bestseller and remained on the New York Times bestseller list for nearly 3 months. Here, Kalanithi's widow, herself an internist at Stanford, talks with Eric Topol about her husband, his book, and the legacy of living meaningfully that he left behind.

A Chance Meeting of Minds and Hearts

Eric J. Topol, MD: Hi. I am Eric Topol, editor-in-chief at Medscape. I am delighted to have the chance to speak with Lucy Kalanithi, an internist on the clinical faculty at Stanford University. Her husband, Paul Kalanithi, wrote a phenomenal book, When Breath Becomes Air (Random House, 2016), for which she wrote the epilogue. We are going to be talking about Lucy's career, the book, and what it means as an inspiration for medicine and for people facing cancer or terminal illness.

You have been busy recently with the release of the book. Your husband, Paul, was a very young man who died of lung cancer. You met at Yale in the first year of medical school. What brought you two together?

Lucy Kalanithi, MD: We met in 2003 at Yale as first-year students. The thing that brought us together was the annual hunger and homelessness fundraiser run by the students at Yale Med. My name was picked out of a raffle to go on a date with Paul. We were never apart after that.

Dr Topol: This was love at first sight.

Dr Kalanithi: Kind of.

Dr Topol: Did you ever think that you would wind up with a physician as a spouse, being a doctor yourself?

Dr Kalanithi: I never thought about it. You make these decisions as you go through your life. I thought I was going to be an engineer or a math teacher, and then I sort of combined the personal and the scientific to bring me into medicine. I was really drawn to Paul in medical school because he was a mix of a literary philosophical guy who was coming into medicine for the deep human part of what it means to be [a doctor]. That was why he was so appealing.

Dr Topol: There are some very different and complementary aspects of your personalities. In the book, he alluded to a moment when you were reading about an echocardiogram of a patient
with ventricular fibrillation, and then you started crying because you realized that that person had to have died. In just a very brief description, he gave a window into your caring and emotional sides. Paul seemed to be a deep thinker with the background not only of having gone to Stanford, but of also having an extra master’s degree in English, and then he went to Cambridge for philosophy and science. He was really into deep thinking, particularly about the meaning of life. Did he talk much about that, or did he just think about it?

Dr Kalanithi: Both. He was talking and thinking about it all the time—not necessarily explicitly, like quoting philosophers or talking about the books he loved, but just the way in which he was so engaged in life. Someone asked me whether he was always really intense. You can tell in his writing that he’s a real striver and deeply thoughtful, and I said yes, he was always very intense. But it wasn’t that he was always very serious. He was just as likely to stay up all night drinking whiskey with an old friend—but that’s a form of intensity, too. He was just really alive.

Dr Topol: What I’m trying to understand was that before he was diagnosed with lung cancer, it seemed that when he wrote the retrospective, it was for understanding the meaning of life through death. What could be more of a challenge—an acid test—to understand one’s life than having to face death? Most people don’t think so much about this, but it’s something that he seemed to clue in to long before he took ill.

Dr Kalanithi: That’s right. Even as a young person, he was very interested in literature and philosophy as a way to get at the question of what makes us human, what it means to be human, thinking about death, and how to make sense of our lives and build value despite the fact that we are mortal. He surprised himself by entering medicine, and ultimately it was because he wanted to be face-to-face with people who were making those tough decisions and approaching their mortality directly. When he was diagnosed with stage IV lung cancer when he was 36 and a chief resident in neurosurgery at Stanford, those questions were no longer theoretical. They were deeply emotional and existential for him. As he was writing the book, he was asking questions about dying. "How do I spend my time?" But those are really questions about living.

Dr Topol: The theme of the meaning of life shines through in an extraordinary way. You both finished at Yale and did different residencies. You were at University of California, San Francisco, and he was at Stanford, where he went into neurosurgery. In the first part of the book, where he recaps that time, there were a lot of deaths. He gives the most elegant description that I’ve ever read of what it’s like to deal with cadavers. He talks about the first death that he encountered as a trainee, premature babies who died, and other patients. He had a list of patients. This made a big impact on him. It was fascinating, even the loss of his co-resident and friend.

Dr Kalanithi: From suicide—that's right.

Dr Topol: He took all of these lessons from that. At that point, he’s well into the neurosurgery residency. He’s not well, but you don’t know what it is. And then what happens?
A Devastating Diagnosis

Dr Kalanithi: For a period of about 5 months before his diagnosis, he had been losing weight and started to have very severe back pain. He had just come off his research years. He reentered the work of a chief resident and was on his feet 14 hours a day and skipping lunch. As an intern, he had lost 15 pounds, so this seemed like the same thing being repeated. Your back aches because you are doing long spinal surgeries. Then he started to have night sweats, and he got some lab tests that were a little off and a back x-ray that looked okay. But things were continuing to get worse, and ultimately he had a chest x-ray. It showed nodules throughout his chest and lungs, and it was clear to both of us, in that moment, what that likely was. Then it was confirmed on a CT that we looked at together. He pulled it up on the screen, and it was a really unmediated way to receive that news—to look at his scan with our own eyes. That was the way in which we received the metastatic cancer diagnosis.

Dr Topol: This is a unique situation of such a young guy, a doctor, who dealt with a lot of brain tumors in the neurosurgery world. And for you, as a physician, and also the spouse, having to deal with this immense issue.

He tested positive for the *EGFR* mutation and initially, at least, had a nice response to treatment with Tarceva. Is that right?

Dr Kalanithi: That's right. He was on erlotinib, and it really brought him back to life. It was actually quite amazing to see. When he was diagnosed, we both thought that he might even die that year. He ended up living 22 months, which is probably around the median survival for stage IV cancer, but that first year was such high-quality time because the therapy had so few side effects. He went back to work initially because he wanted to finish residency, and he was always working toward the best-case scenario. He knew that on erlotinib, maybe he would live a decade, and he said, "If I don't become a neurosurgeon, you would be really mad if I live 10 years." So, that was the best-case scenario and he set down the neurosurgical path again. When erlotinib failed, the prognosis shrinks, the treatment becomes more debilitating, and that was when he started to focus on writing as his top priority. And we were also having a baby.

Dr Topol: I was struck by how, as he was doing his neurosurgery residency, it seemed as though he had done it and yet he still wanted to make sure that he fulfilled every last requirement. Wouldn't they give him a pass? He was being treated for lung cancer and he went through all of this stuff. Did he even ask whether he had done enough to graduate?

Dr Kalanithi: He met the technical requirements to graduate. But there was a moment, which he describes in the book, when he was doing shift work, in a way. He would come in and take care of patients, but he wasn't rounding. He was just in the operating room, to meet the technical bar.

He also started staying later and later because the thing that was the richest for him was the people who he was taking care of—shepherding people through this difficult time, and not just being technically excellent but being connected to his patients. That was what brought him enough meaning that he could suffer through. He was in pain and he was nauseated. We did a
lot of work with his medications to try to control his symptoms so that he could focus on his patients.

Writing the Book: A Dream Come True

Dr Topol: When along the way did he say, "I'm going to write a book"? When did he have this epiphany?

Dr Kalanithi: He always thought that he would be a writer. He was a very talented writer and he loved it. He wrote that essay in the New York Times, "How Long Have I Got Left?" He wrote it on a flight and he wanted a way to work through the challenge of facing uncertainty. Even when you have a terminal illness, you're still also coping with uncertainty about when and how, and what the future holds. He wrote that essay and sent it to two friends. The first friend wrote back and said, "This essay isn't that great yet—you buried your lead and it's not very funny, and you are making three points at once." The other friend said, "I forwarded this straight to the op-ed desk at the New York Times." And they ended up publishing it almost without any edits. Then he was approached by agents and editors after that, which was literally a dream come true.

Dr Topol: So it was the op-ed that led to this. He wasn't thinking of writing a book at that time. Being so sick, it must have been very hard.

You get into some of the things you had to do to try to support him to be able to write. Obviously he had immense talent. As Abraham Verghese says in the prologue, "It took my breath away to read this." It was no surprise when I first read it that this would become the number-one nonfiction book everywhere. It has had perhaps more impact than any book that I can remember. You had to finish the book because he was so sick that he could only get so far. That wasn't your plan, to be a writer, particularly at this rarefied level. How did you deal with that?

Dr Kalanithi: There was more that he would have liked to write, but when he died the book was a manuscript on his computer. It was an open Word document. He died on a Monday night around 9 o'clock, and then 12 hours later I was on the phone with his agent and editor asking how we could still make this happen. He had wanted it to happen. He had secured the book deal. He was totally thrilled, and then when he knew he was dying and couldn't work on it anymore, he said, "Can you please try to publish this in some way?" We didn't even know if it would be a series of essays or a book. It took a lot of work throughout 2015 to put it all together. It was copyedited and we supplemented it with other writing that he had done. Here's an example: He had written in brackets, "insert anatomy lab essay"—an essay about the anatomy lab that he had written as a medical student. There were other pieces of writing that made their way into it to make sure that it could be a book. It's all his writing, but choosing the cover and many other decisions, I had to make for him, and then I wrote the epilogue.

The Title

Dr Topol: He had come up with the title? It could not be more perfect.

Dr Kalanithi: It's from a little Elizabethan poem by Greville that starts out with, "You that seek what life is in death now find it air that once was breath." He had this little volume of poetry that
he read when he was sick—some amazing poems, like "The Glories of Our Blood and State" by James Shirley. He was reading a lot about mortality and death, and when he read that Greville poem he said, "I think I have the title for my book," and he put a little star next to that line. It's beautiful.

Dr Topol: You touched on the fact that there was another side of him. He was not just the deep thinker and serious philosopher about the meaning of life, but also a jokester and a person with a lot of humor. It struck me so much when he said to the oncologist after the diagnosis, "Can I start smoking now?" Or when you had your in vitro fertilization, you had the blastocyst and he said, "The baby has your cell membrane."

Because of what you have done together, writing the book and capping it off with this amazing epilogue, you have immortalized his life. What has happened here is that so many people have read this and have been inspired to be able to face death, but also to make the most out of life as possible and to be brave and courageous. Where do you take this now? This is an unparalleled story in many respects. You are young. You have a medical career. How do you integrate what has happened here with your arc in medicine?

Dr Kalanithi: "Integrate" is a great word. It's funny, because I thought after Paul died I would work really hard to make sure this book happens, and then I'll go back to my job. I'm an internist, and I was at this great research institute at Stanford that thinks about healthcare value. And then, with the response to the book, I've been able to enter the national conversation about end-of-life care, which is so compelling and amazing to me. It's a way in which this experience stretches forward into the future for me to be thinking about this as a widow, a former caregiver, and doctor all put together. And I don't know where it's going to lead me, but I am also much more comfortable tolerating uncertainty. In medicine, you get on this path and you feel like you're going to be on this one path that you can see stretching out; or you think that you need a credential for every single thing you say. Instead, speaking about this personal experience has taught me something else about expertise, authenticity, and making a difference. It's just been amazing.

Dr Topol: Some things go beyond evidence-based medicine. What you are getting at here is something that our society has had such a difficult time grappling with. You have some invaluable lessons and experiences here to get out. For me, this has been a great opportunity to learn about what happened, to get in your head about what happened during a horrific experience that turned into something that is not just instructive but highly inspirational. I give so much credit to you. Many people who have read the book say, "What a courageous man and brave person to look death in the eye and articulate it as he did." But equally so is what you have done, and continue to do, to take this mission forward, and all that you learned to help impart to others. So, thank you for what you've done.

We are fortunate to have a physician in our midst who can help take this forward. This book is one that every medical student should read as part of their curriculum, but it's much bigger than that. It's not just about doctors learning about the care of their patients; all people could benefit. That means you need to print about 7 billion books translated into a lot of different languages.
Thanks, Lucy, for joining us on Medscape One-on-One. Thanks to our viewers for your attention to a very interesting conversation with a remarkable person. If you haven't read the book, you ought to, because you will be inspired.