INTRODUCTION

This is Books and Ideas Episode 28, and I am your host, Dr. Ginger Campbell. Today is Part One of an interview with Dr. Robert Martensen, author of *A Life Worth Living: A Doctor’s Reflections on Illness in a High Tech Era*. Dr. Martensen practiced emergency medicine for 25 years, but in the middle of his career he went to graduate school and earned a PhD in history, concentrating on the history of medicine. Between this and his interest in ethics and philosophy he brings a unique perspective to some of the problems facing both patients and physicians in these days of high-tech medicine.

He is currently the Director of the National Institutes of Health’s Office of History and Museum. In this first part of the interview we will talk about Dr. Martensen’s career and also he will tell us a little bit about the NIH Office of History. Unfortunately, when I was talking to him I didn’t realize that he had time constraints that prevented us from doing the entire interview in one sitting. So, he will have to come back later in order to talk about his book, *A Life Worth Living*. 
Before I get into the interview I just want to remind you that if you want to listen to previous episodes of Books and Ideas you should go to booksandideas.com where you can find links and Show Notes for all of the episodes. You can also send me email at docartemis@gmail.com. Let’s get on into the interview.

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The views expressed in this interview are those of Dr. Martensen, and do not necessarily represent the views of the National Institutes of Health.

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INTERVIEW

GC: Today on Books and Ideas my guest is Dr. Robert Martensen. Robert, it’s great to have you on the show today.

RM: It’s very good to be here, Ginger. Thank you.

GC: Before we start talking about your new book, I was wondering if you would just tell us a little bit about yourself?

RM: Yes; about how I got into medicine, perhaps.

GC: That would be a good place to start.

RM: OK. Well, I didn’t major in pre-medical subjects in college. I took a chemistry course. And this was in the late 60’s, and pre-med students were just ferocious. And even in that day, ferocious meant spoiling each other’s lab books so that they’d be better on the curve in grading. I happened to like chemistry but I just thought, I do not want to be a pre-med. I do not want to sit in these classes and go through it.
So, I actually majored in design—in visual studies—and wrote stories and took a broad array of courses. I had thought about being a doctor, but didn’t really pursue it. And then after college I was—in those years it was called a drop-out; now people who take time off are called something else—but I was a drop-out and had a variety of jobs. One of them was as a hospital janitor in New Mexico, and through that experience I decided I did want to be a doctor.

And so, I spent a year taking the science I hadn’t taken in college and then went to medical school with the idea that I would be a general practitioner and live in a semi-rural setting in Vermont—I was going to medical school in New Hampshire—and write stories. So, I had that idea, and that’s how I became a doctor. My mother’s background was in bacteriology and my father’s was in engineering, so there was a kind of science-technical angle to the household culture in which I grew up.

**GC:** So, at the time you went to medical school emergency medicine wasn’t a distinct specialty yet.

**RM:** No, it wasn’t. I think there was one residency, perhaps, going in Cincinnati. But there wasn’t any in San Francisco. And I did my residency at San Francisco General and in the UC San Francisco Department of Medicine. The training we were able to get was a program that lasted two years, I think, and there were only two people in it. And it was a fellowship in emergency medicine. That’s what I did.

In those days the department of surgery controlled the San Francisco General ER. And there was a kind of turf dispute between medicine and surgery that played out in different ER’s across the country: is the emergency department primarily a surgical space where the energy, training, and control comes from people whose background is in trauma, or is it a multidisciplinary space where most of the
patients have medical problems and there is an auxiliary relationship with a trauma team?

And then the surgeons were debating whether the trauma surgeons or the orthopedic surgeons would control ER’s. So, all that was playing out in the mid to late 70’s. And emergency medicine residencies—a few—were starting to take form across the United States.

**GC:** Right. By the time I came along—I graduated in 1984—it was a recognized specialty, but I was living in Alabama and we had a very short-lived residency program that’s come and gone. And I’m not even sure if it’s in the come or the gone state right now. I ended up doing my training in family medicine, which if you work in a small ER turns out to be just the right training anyway.

**RM:** Well, family medicine is good training for that and for almost all emergency situations. It’s interesting you mention that, Ginger, because—I don’t want to do too much of the history of the specialty of emergency medicine—but I find it interesting that the fight (and it was a true fight) about recognition of emergency medicine as a distinct specialty was between family medicine and emergency medicine.

Family medicine had its own struggles and got approved as a recognized specialty a bit before emergency medicine. And when emergency medicine came along, family medicine leaders said, ‘You don’t need it. It isn’t necessary. We can do everything.’ That battle waged for a few years. The outcome looked in doubt at several points, but emergency medicine was recognized as a specialty. And I think that tension still plays out across the country.

If you look at emergency department full-time positions, about half are filled with people who are board certified in emergency medicine now—residency trained—and about half are filled with positions from other backgrounds, primarily family
medicine. And I think that the claim of emergency medicine residencies as a specialty, that they are the only appropriate physicians to belong in emergency work, doesn’t really hold up. It doesn’t hold up intellectually and it hasn’t held up in experience. If they were, then hospitals would say you have to be board certified in emergency medicine; and a lot of them don’t.

**GC:** Giving that background of the position of the political leaders of family medicine, that’s enlightening to me because that gives me some insight into the reason why the political leaders of emergency medicine now—at least some of them—tend to treat those of us trained in family medicine as second-class citizens. I guess that’s an example of one of those ‘what goes around comes around’ principles.

**RM:** Well, I think it’s that. And it’s also, here’s emergency medicine where the founding figures—like the founding figures in any specialty, including family medicine—never went through residencies in emergency medicine or residencies in family medicine. They’re the ones who set up the residencies and the journals. Nonetheless, things get going and they kind of pull up the gates and say, well now you need a residency training in our specialty.

And emergency medicine I think has always been a little insecure in professional terms in making the claim, only we who are trained in emergency medicine can take care of emergency patients. That’s a claim that doesn’t really hold up in experiential terms.

**GC:** No, because every physician that takes care of patients has to be ready for certain emergencies, if not the whole gamut.

**RM:** Right; and most patients in emergency rooms, whether small community-based hospitals or large urban academic medical centers, don’t have life-threatening problems. They come in with a much lower acuity profile.
GC: Given the volumes we’re seeing now, thank goodness that’s true.

RM: Right. Even in the academic emergency departments these days, there’s an urgent care center staffed by physicians and physician assistants. They’ve stratified their emergency departments in terms of level of acuity of patient problem. And that’s reflective I think of this tension about what constitutes an emergency from the patient’s perspective, and what training do physicians need to manage emergency conditions.

So, emergency medicine has been this kind of insecure specialty. And I think when people feel insecure in general in life they tend to get more rigid, and be a little puffed up, and judgmental, and find fine distinctions. Emergency physicians as a group—I’m speaking at the organizational leadership level—tend to be very conscious of credentials, letters after the MD, etc, etc. And that to me is a mark of accomplishment, but it’s also a mark of insecurity.

GC: Well, we could have a whole podcast on emergency medicine—which wasn’t our goal. So, I’m going to change the subject.

RM: OK.

GC: After you were already practicing as an emergency physician you went to graduate school?

RM: Yes. I had been practicing for maybe 13 years. At that stage I was around 40. As many 40-year-olds do, I kind of stood back and looked at life. And I wanted to integrate my medical side with my interests in the humanities—broadly put. And I wanted to do it in a way where I would be taken seriously. And in modern life—particularly in academic life—one isn’t taken seriously unless you have a credential.
So, I wanted to immerse myself in a broader understanding of medicine and society, and I chose history. If one wants to be taken seriously as an historian, then you need to have advanced training. So, I enrolled in a program at UC San Francisco, which had a Department of History of Health Science. And I got a Master’s degree and then a PhD through there and UC Berkeley. That took five years, and during that time I was seeing patients at night and on the weekend.

**GC:** And your PhD is in history, then?

**RM:** Yes.

**GC:** You also have done a lot in the field of ethics. Was that part of your graduate training, or something else that you did?

**RM:** I had taken philosophy courses as an undergraduate and philosophy of science in graduate school. And then I found when I had this medical background and this training in history of science and medicine, I was offered an opportunity from the University of Kansas to chair their Department of History and Philosophy of Medicine. We taught medical students history and philosophy in all four years. Well, philosophy really came down to bioethics.

So, in order to teach that I started reading a lot. And I was appointed as the Chief Ethics Officer at the University of Kansas Medical Center for awhile. So, I was dealing with ethical issues routinely in an administrative capacity. And then I started getting interested in the history of bioethics: how it had started, how it had changed, its professional story—just like we talked earlier in our conversation about the professional story of emergency medicine, and a little bit about family medicine—that started intriguing me.

So, I had become gradually more involved in bioethics. Obviously I don’t have a degree in moral philosophy or religious studies, which were the academic backgrounds of most early first-generation bioethicists. But administratively I’ve
chaired a few programs now that combine kind of medical humanities. And at Tulane I was their first holder of an endowed chair in ethics and humanities.

**GC:** During that time you were doing this were you also still doing emergency medicine?

**RM:** Yes. All the way through 2002. I was administratively involved in leading a department in history and philosophy of medicine, and then one or two evenings a week I would be on duty as the emergency attending.

**GC:** So that sort of kept you grounded, so to speak?

**RM:** Right. I like that word ‘grounded’ because it’s very concrete being in an emergency setting. That was beneficial in many ways, and I think that my other perspectives from history and bioethics certainly were good in teaching in the emergency department; and also I think in taking care of patients.

The flip of it is, to only be taking care of patients one or two days a week requires a lot. You’re a member of a department—the emergency department. There’s a whole set of meetings. There’s a whole continuing education. One needs to be up to date. And the challenge is—when you’re only using your hands and those skills, not full-time but part-time—the risk and the reality of the kind of decay of skill. One always needs to be able to get the airway, for instance. And when you’re doing that 12 times a month your skill level stays up. When you’re doing it 6 times a month you need more immersion in simulators and so forth.

So, I found over time it became a grind. And then the hospital I was working in—University of Kansas Medical Center—suddenly got very much busier because another local hospital that took care of indigent patients shut down its ER. So, we had been seeing from 40 every 8 hours; we started seeing 60 patients every 8 hours. And we did that with one attending. One fellow, not in emergency medicine, typically family medicine, and some medical students in a high acuity
ER where twenty percent of the patients get admitted—in a major trauma center. So, I thought that was just too much. Whether it was me or anybody else, the staffing was inadequate to the patient load.

GC: Is that when you went to NIH?

RM: Well, it was what happened. Yes. I had been awarded a fellowship that allowed me to take some time to do research for a different book. And then I was recruited by Tulane. Tulane was looking for a new head of its Humanities and Ethics and they were trying to get a program going, and they didn’t emphasize taking care of patients. And I thought at the time, ‘OK, I’ll take a break. And Tulane is involved with Charity Hospital in New Orleans. It’s an interesting place, but I want to take a year and do this other project, and get settled in this new role down here.’ And then as time passed I found I just kind of let practicing medicine go, and concentrated more on writing, and teaching, and program building.

GC: So, then when Katrina came, you were at Tulane when Katrina hit?

RM: Yes. I left New Orleans two days before Katrina hit, so I didn’t physically go through what people who stayed went through after the levees broke. But I lived on Lake Pontchartrain, and the storm surge pretty much destroyed our neighborhood. And then when I was able to get back, when we were permitted into our part of town—which was early or mid November of 2005—everything was wiped out.

So, I found another place to live. And Tulane initially had said, come back. A month later they said, services no longer needed. So, I was out of a job, along with many others at Tulane. I stayed in New Orleans for five or six more months and was looking for a job. There weren’t any in the Gulf Coast. There was a
crying need for physicians, but there were no places that I could work. And I was offered another job, and left.

GC: Is that when you went to NIH?

RM: No, I went to North Carolina to the Brody School of Medicine. They had, and have, a Department of Medical Humanities—one of the first in the country—and they were looking for a new leader. The previous leader had retired after founding the department. So, I was there for a year, and then recruited for the position I have here at NIH.

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This episode of Books and Ideas is sponsored by Audible.com. If you sign up for a trial membership you can get a free audiobook download by going to audiblepodcast.com/booksandideas. As I’ve mentioned before, I’m a long-time Audible listener. Right now I’m listening to Looking for Alaska, by Peter Jenkins. I think this one is several years old, but since I’m getting ready to go on a cruise to Alaska in June I’m listening to this one to get ready for my trip.

Let’s get back into the interview.

[music]

GC: Robert, would you like to tell us a little bit about the NIH Office of History? Is that what it’s called?

RM: Yes; or the Office of History at the National Institutes of Health. And I spell that out, because when we’ve done surveys here of awareness of NIH we’ve found that 85-90% of the American public has no idea what NIH stands for.
GC: And then when I consider that I have international listeners, I guess that makes it even more important that we spell it out.

RM: Well, the NIH—or the National Institutes of Health—is the primary biomedical research organization in the United States. It funds biomedical research in the U.S. and elsewhere. The budget has been running in the mid 20 billions. Under the Obama administration the NIH has just gotten another 10 billion in stimulus funds. So, it’s a very large organization. The campus on which I work has approximately 14,000 people here, and we represent intramural research. We’re only 12 or 15% of the total NIH world, most of which happens out in universities and in grants to researchers based in universities, and research institutes here and abroad.

In the History Office our goal is to enhance historical understanding of biomedical research that has been funded by the federal government, primarily since World War II. So, we have a kind of broad writ to look at almost anything that’s happened in new knowledge in medicine, because the NIH has been the primary funder worldwide in every area, from vaccines, to aging research, to nanotechnology, to information technology, cardiac disease, pediatric disease, mental health issues, and so on, and so on.

It’s a fascinating job. And what I have concentrated on in my time here—I got here in October of 2007—is, first of all, recruiting postdoctoral early career historians of science, and finding funding for them to spend a year or two here doing projects of their own choosing in history of biomedical research. At the moment we have four and we have four more coming in.

One is doing a history of aging, one is doing a history of cancer viruses and recombinant DNA technologies, one is doing a history of alternative and complementary medicine, another is doing the history of cardiovascular risk factors in the diet-heart hypothesis, and so on. So, that’s very exciting to me,
because we are training these early career historians who will then go out and populate university departments in history of science and write wonderful histories of these areas.

We also are an archival operation, so we preserve historical materials relating to the NIH. And we have a very active website if one goes to history.nih.gov. We’re just redoing it and there are tens of thousands of images, and texts, and so forth on it.

The third piece of what we do here is a museum. The museum mounts exhibits around the NIH campus. We have just been approved for permanent space in the Clinical Center here, and I think our first major exhibit is going to be on replacement heart valves, which were developed here at NIH. A key person in that story—that starts in the 1950’s—is a physician, Nina Braunwald; whose husband was Eugene Braunwald.

Nina Braunwald was the first woman to be a board certified cardiovascular surgeon in the United States. And she was instrumental in developing heart valves here. And she was here at a time when it was very difficult for women to gain tenured positions in medical schools. The NIH has always been more open to women and ethnic minorities than the universities. This goes back to the 1940’s when women were really kept out of academic medicine and out of faculty positions in the sciences. They were encouraged to come here.

So, there’s that kind of gender side of Braunwald’s story. And then we’re following this collaboration between the cardiologists, and the CV surgeons, and the materials people—the bioengineers. And then finally how it’s used in the animal trials, and then in the early patient trials, and the collaborations at that point between NIH and people in industry who commercialized these replacement valves.
So, it’s a bench-to-bedside story and it all happened in the Clinical Center here, which is a research hospital which was built in the 50’s and subsequently remodeled on this campus. We’re running a Darwin exhibit now to commemorate the publication of Darwin’s *Origin of Species*. Both these kinds of exhibits will have a virtual counterpart, and we’ll have online exhibits and traveling exhibits for some things we’re planning in the future.

**GC:** So, even though your focus is on what’s happened at the NIH—especially since World War II—it’s not limited to that. Because Darwin is obviously –

**RM:** Right. Yes Darwin outdates the NIH. And I should say we’re doing the Darwin exhibit with the National Library of Medicine, and we’re having a Darwin symposium next year with the National Library of Medicine. We’re looking at what did scientific proof constitute in Darwin’s day and in making evolutionary arguments, and how has it changed from then to now.

And we’re bringing in E.O. Wilson, the sociobiologist. And we’re having a film series of Darwin and evolutionary-related films. But our principle focus in this conference is to look at what constitutes and has constituted proof. What is an acceptable scientific argument when it comes to evolution?

**GC:** That’s certainly a very important topic.

**RM:** That’s October 1, 2009, this fall. And it’s open to the public and free. It’s in Bethesda, Maryland on the campus of the NIH. We may not be able to do it simultaneously; it may be subsequent on the website.

**GC:** Oh, OK. When you were working on your PhD did you focus on a particular time in the history of medicine?

**RM:** I did. The question I wanted to ask in historical terms was what makes a living human being a person in cultural terms. What is it about understanding of
the human body? What organ systems make us think humans are persons? I got very interested in this shift that occurred—the scientific revolution; the period from roughly 1540, when Copernicus and Vesalius published, to around 1720, the time when Newton died.

In that 180-year period there was a sea change about ideas about man’s relation to nature. Ideas about man, nature, and the cosmos fundamentally changed. And one of the changes was a movement from thinking that human bodies were kind of organized around heart, brain, and digestive system, to thinking that the brain and the cerebral cortex was the defining aspect of being human.

And what went into that shift—the scientific factors, political factors, religious factors, economic factors—who did it, how did they make the change, what arguments did they use? And who resisted their arguments? Because this wasn’t accepted by many people. So, that story intrigued me. But, Ginger, I have got to stop. I’m due in New York at noon and I’ve got to go. It’s been fascinating.

**GC:** Let’s get back together, and if I have to I’ll just post it as two halves.

**RM:** Yes, that would be fine. Because I’d love to talk about the book.

[music]

I really enjoyed talking with Dr. Martensen, and I look forward to having him back on the show so that we can actually talk about his book, *A Life Worth Living*. This is a book that I learned about from hearing him interviewed on *Fresh Air*, which is an NPR radio show which is also available in podcast form.

This book is full of stories about real-life patients and how they have faced some of the problems that anyone that has had anything to do with modern medicine may be aware of—issues such as making end of life decisions and dealing with
questions of deciding when more technology is not necessarily better. So, I hope you will come back next month for that follow up.

If you aren’t already subscribed to Books and Ideas I hope you’ll subscribe, because that way you’ll be able to get the next episode automatically. I want to thank those of you that are supporting both of my podcasts, Books and Ideas and the Brain Science Podcast, with donations. You can learn how to do this by going to gingercampbellmd.com and clicking on the Donations tab up at the top of the page. You can use your credit card, PayPal, or even send actual checks via snail mail if you live in the United States.

Even if you can’t afford to contribute to my podcast you can help support Books and Ideas by telling your friends about it, and blogging about it, and giving us votes on Digg, Podcast Pickle, and other sites. And especially if you happen to listen on iTunes, please go into the iTunes music store and leave a review. I’ve got lots of reviews for the Brain Science Podcast but I don’t really have many reviews for Books and Ideas, so that would really help out a lot.

I also want to remind you that if you want to give me feedback for this episode you can post comments on the website booksandideas.com, which is actually inside gingercampbellmd.com. You can send me email at docartemis@gmail.com. Or, you can participate in the Discussion Forum, which is inside the Brain Science Podcast Discussion Forum at brainscienceforum.com.

Since I have a little extra time because this episode was short, it gives me a chance to talk about a couple of other things that I usually don’t have time to get around to. For those of you who do not really like email, you can find me on Twitter as Doc Artemis, and also on Facebook under my name of Ginger Campbell. If you send me a Friend request on Facebook, don’t forget to say something about the fact that you listen to my podcasts. Same thing if you’re
sending me email—it’s always great to put something about the podcast in your subject line. That helps me to get your email without it going into the junk box.

For those of you who are listening to the *Brain Science Podcast*, I’m working on a new project which is to create continuing medical education materials for selected episodes. I’m going to start out working toward creating materials for physicians and nurses, but I could use some feedback from psychologists about how to make materials for you too. So, please be sure to let me know if you’re interested in becoming part of that.

Meanwhile I am going to continue to put out both podcasts once a month, with an aim toward putting out the *Brain Science Podcast* on the second Friday of the month, and *Books and Ideas* around the fourth Friday of the month. So, I’ll be back with you with another *Books and Ideas* next month. If you haven’t heard the *Brain Science Podcast* yet, I hope you’ll check it out at brainsciencepodcast.com. And if you’re looking for other science podcasts, don’t forget to check out sciencepodcasters.org.

Thanks again for listening. I look forward to talking to you again next month.

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Theme music for *Books and Ideas* is “The Open Door,” by Beatnik Turtle. Be sure to visit their website at beatnikturtle.com.

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