Life Science Success Podcast Transcript

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Don Davis

Welcome to life science success podcast. For those of you who don't know me my name is Don and I'm a consultant in life sciences and uh I'm very excited today to hop into our interview but before we do I wanted to just uh also quickly mention that um there's a lot of focus right now um for the different live events that I've been providing around uh strategy, metrics, roles and responsibilities; all of those sort of things for companies in life sciences and so if you're a company who is scaling so so you're you're growing in overall capacity and your organization is growing my consulting agency focuses in on strategy people and process and we currently have a free series that's going on that you can find at the link at the bottom of this current page so the scaling method.com/thoughtatscale is where you would go uh to find more information about that and um. So with that let me hop right into the interview today on the life science success podcast we have a very special guest with us David Hibbard he's the vice president of engineering at Sunrise Labs with over 25 years of experience in medical device development and so I'm very excited to have David on and get to talk to him about what they're currently doing at Sunrise labs and all the great things so welcome David.

Dave Hibbard

well thank you for having me it's a pleasure to be here

Don Davis

yeah it's great to have you and um so would you mind just taking a little bit of um time to explain to everybody a little bit of the journey that you took to get to this point in your career where where you're currently you know developing a lot of different medical devices for companies

Dave Hibbard

yeah so I've as you mentioned I've been doing medical devices my whole career so I originally got a biomedical engineering degree from Boston University so I graduated in the early 90s and really um one of the things I was sort of I know pivotal for me is that when I went originally went to school I started as a biology manager and saw in the first semester that um bu was one of the few accredited biomedical engineering programs um in the us at the time there's maybe only like 30 or 40and uh immediately was like oh that's where I got to go right so I I switched disciplines from you know a straight up life science into biomedical engineering and that you know for me that's was a was kind of a no-brainer and uh was a great switch for me and I think it's worked out well for me in my career but um so I've as I mentioned I've been working my whole career in medical devices um I've worked both on the services side for about half my career and I've worked about half my career on a prct uh direct product uh delivery side so I've worked for large companies um you know metronic I spent uh about 10 years with metronic part of that was through acquisition but uh uh you know I started with a smaller company there and was brought into the metatronic family and then um also worked for a couple other uh device companies one in stress echocardiography and one in uh proton therapy and then from a Services standpoint uh I worked at Deca for about uh eight years and then have been with Sunrise labs for a little less than eight years now

Don Davis

it just seems like a a pretty varied career I always um I always talk to people as well about this um this statement that was made to me a little while ago so it was probably like six or eight months ago somebody called me a generalist and I was like wait a minute kind of offended by that that term but at the same time I feel like I could play in a lot of different lot of different uh zones right so I mean I feel like uh you know there are a lot of different areas around operations that that I'm familiar with and I feel like you know from an engineering standpoint it feels like you've crossed a lot of different paths and industries as well

Dave Hibbard

yeah yeah so I you know that is a term used a lot with the biomedical engineering degree in general so uh you know a lot of the original biomedical engineering degrees were sort of electrical based somewhere more mechanical based but um you know at bu it was kind of a widespread program right so it's not real in depth in any particular discipline but kind of really covered them all and tried to bring them back around um in the latter part of the uh the education to be more of like a medical instrumentation type uh degree but you know we had to have the foundations in mechanical electrical and everything else so yeah so I don't I I'm not offended by that term

Don Davis

yeah it took me it took me a little bit by surprise it was one of those one of those things where I was just like you know I don't know if that's a good thing or a bad thing um in a lot of ways I feel like um it's always a lot of fun for me to be able to play in a lot of different areas as well so um you know not not necessarily offensive from that standpoint I feel um greatly benefited by the fact that I can you know talk to folks in both Pharmaceuticals as well as medical device um which kind of leads me to my second question for you is is that you know you've LED projects across you know diverse medical Fields um you know from any everywhere from dialysis to radiation oncology um how does that how do you have to change like the project or program management approach um you know to be able to match those those specific areas

Dave Hibbard

yeah a lot um so a lot of it I think depends on uh the structure of the team right so if you when I was doing the paratenial dialysis program we had a a very large team we had um I think maybe 30ish engineers and then another maybe eight or so on the test side so it really was a fairly large team over um six seven eight years and you know in that case as a project manager and that when I was back at Deca that really did um depend a lot on having strong leads in each discipline right so I needed to have uh a great software engineer lead a great mechanical engineer lead and uh great electrical engineer lead it was really really fortunate at that time to have that um you know one of the things that uh I really enjoyed about my time at Deca is that the engineers were phenomenal right they they really understood their stuff they really um were willing to take risks and reach for you know a high-end uh goal so that you know taught me some things as well about um you know coming from a company like metronic into Deca you know metronic tended to be a little bit more conservative we want to know when this project's done we want to know how much it's going to cost that type of thing and and when I got into you know Deca every project was let's shoot for the moon and uh you know it was a little bit different mindset and it it took me a little little bit of adjustment to get there but you know after I made that adjustment it was it was fun and it was interesting and um you know it was great to have a lot of resources to be able to to um you know make that transition really make a a device that is really a true game-changing next end nextgen device um you know just a a couple other things there you know one is about structure of the team um you know having strong discipline leads um one that to me is really important is having uh a great relationship between the lead system engineer and the project manager and I I feel that those roles while independent work best when they really overlap to some extent so um you know the system engineer is really looking out for some of the things that the project manager is looking for and the project manager is looking out for some of the things that the system engineering is working for so you know in my career and you know as I'm looking for PM’s and hiring project managers I'm looking for people with an engineering background so that they can really kind of one its best if they've practiced engineering um in some form or another but to at least have um a strong understanding so that they can really kind of I know if it's really back up the system engineer but really work well with the system engineer to kind of understand some of the technical trade-offs and you know make sure that parts of all parts of the project are getting done and then again same thing from the system engineer it's like hey PM you forgot about document X right so there's definitely a relationship there that needs to be built um a couple other things about um you know just sort of varying project management um you know one is certainly to understand regulatory strategy you know what how am I going to get this particular device to Market um and you know that includes knowing you know what the software level of concern is um you know whether in the new terminology I guess it's enhanced documentation or not um you know what it is in terms of 62304 is a class A B or C software and you know when you and eventually do that regulatory filing is it a PMA is it 510k is it class one class two class three you know all of those things I think affect sort of the flow of the project and um you know when you have to have design controls embedded in the system right so you can do a clinical trial and you really need to count in that data as part of your submission in which case you need to have your design controls in maybe a little bit earlier um that type of thing so it's and then I would say the last thing um in terms of uh project management is you know at Sunrise Labs we're a services company right so we're we're trying to we're partnering with outside entities that are trying to make some sort of project and I you know make some sort of product at the end of the day and part of um you know what we're trying to do is you know be a good consultant to to those companies and we're also trying to make sure that um we're maybe filling in where the company doesn't have core competencies right so uh if a if a company comes in and they're trying to create just an insulin pump or something like that right their their core technology may be around either storage of insulin or delivery or you know pumping Technologies but it may not be around a companion app right and they may never really want to be an app developer right so they're going to come to us and we can give them advice or help on the uh the instrument inside but you know maybe they are really looking for us just to do the app uh and we can certainly do that too because it's not at the end of the day it may not be where they want their core competency to be right you want to develop a company around what they really want that company to be and it again some parts of the technology may be very core to them and some may not

Don Davis

yeah yeah and I think it's uh I think it's important to to understand both the organizations limitations as well as you know how do you how do you uh become their best partner possible right and um you know oftentimes um you know I've worked with work with vendors that you know have a strict SOW and that SOW you know then leads to you know some challenges in terms of that but understanding you know both or the organization who's requesting the device as well as the organization who's building the device - Sunrise labs in your case um you know it's just really um you know critical to to outline those factors early on and and then understand how that partnership's going to work in the end

Dave Hibbard

yeah I totally agree and you know maybe one more thing we just mean there is to understand really what the you know the MVP is if you will right so what's what's the product that's going to get them out the door and get them start earning Revenue uh and start really getting clinical uh use on their device so you know a lot of times uh customers make command they be like I want every every functionality that I could possibly put into this device and you know one of the discussions that we want to have early on with them is you know what's it going to take to really make a device that gets into the market and get you um some revenue and get you going without putting every single feature that you ever thought of you know think of your road map um as opposed to everything in the first launch

Don Davis

yeah and I mean that point of um that point of MV MVP and defining what those critical what are those critical elements of the of the devices is most important as well so tell me about the day in the life of you know your your typical you know day um at Sunrise lab what does that look like for you and um yeah just curious to to explore a little bit more about you know how many projects you're normally looking at and how you know how do you manage you know kind of the workflow of all of that

Dave Hibbard

yeah so we Sunrise is still a relatively small uh company um so we have you know we bring in contractors when we need to but we have anywhere between about 70 and 100 Engineers depending on uh the needs of the projects um and then we also have obviously operations and other staff as well um so for me personally the the software teams the electrical team the mechanical team and the user centered design team uh report into me so obviously my first focus is making sure that we have uh the Staffing and tools that those teams need to be successful um and you know we also you know particularly in the last year or so I've been really looking at a lot of uh process um type improvements I want to make sure that you know we're following a good process that makes us as efficient as we can be uh as we look to you know again partner with a client to to make a product um but you know being a small company the my role is is very varied right it's it's all over all over the place right there's some portion of it that's very interrupt driven right people are coming in just like hey is this okay that okay um you know and it's it's kind of interesting and one of the things I think I've learned over over leadership is you know a lot of people really do they always want to do the right thing they have um really good ideas and sometimes they're just just looking for someone to say yes and and you know that you know someone coming to me and being like I have this great idea that's going to save us a bunch of time right it's easy to say yes uh to that type of thing and sometimes it's you know just empowering people to to say hey yes go ahead and do that we want to make that Improvement um you know so there is definitely a portion of my role that's about staffing a portion of my role particularly uh partnering with the uh director of uh programs um so program management uh to make sure that our projects are successful right and I'm looking more at the staffing side process side tool side uh and the director programs is looking more at the communication side um you know how do we keep the customer informed how do we get the customer involved um are we on track to deliver uh you know what we set out to the deliver

Don Davis

yeah and I guess from that standpoint since you brought up the product development process um earlier on in your in your comment so do do you have to try and take your PRD process or whatever your project you know product development process is and try and interface that back with the clients or you know do you typically follow the clients milestones and just make sure that there are key um key things that are that are there in terms of you know the needs that they're going to have in terms of your regulatory requirements

Dave Hibbard

yeah life would be so simple if there was one easy answer right so uh it's both right it's um you know we have a process that's um certified to 1345 so we've been certified for about 10 years now obviously do our compliance audits every couple of years um so we have a full-fledged quality system that can cover software development um full product development you know mechanical electrical everything else um so we try to leverage that when we can right so um some customers come in and they're a startup customer and they don't really have uh quality system they may not really even understand what the quality system is there for or what it's going to do for them um the other companies you know we might get a a partner of a you know Fortune 500 company something like that and they come in and they're usually looking to um you know follow their own process although even in those cases Sometimes they come in and they're like look we got a lot of a lot of red tape so what we want you to do is follow your process give us a documentation at the end we'll re-release it uh within the quality system of the larger company company uh and then we'll go from there so yeah it really does vary and it's uh it's it's one of the things um that we really need to work with uh the client on and the PM’s on to make sure that the the documentation package that we're coming out really does meet their needs and um you know the other thing that's really I don't know if it's surprising or amazing or whatever but you know there just the the level of documentation and the type of documentation varies so widely from company to company you know we get you know one company come in that's like we want you to develop this entire system with two requirements and we're like

okay maybe we need to Define it a little bit more than that and then you know you get again you know one of the bigger Fortune 500 companies come in and they're like here's the 8,000 requirements that we want you to digest in the next two weeks and so it's all over the board but

Don Davis

yeah and give us a discounted price by the way so of course of course just in case any of are M lissing I know I know that you know after after working with a few of the larger companies myself I familiar at least with uh with outsourcing some of these things and you know I feel like you know there are two there are two ad two distinct advantages I feel like to coming to a company like Sunrise one is you know the the ability to innovate right so innovate you leveraging people that you know may think truly outside of the box because you're not in the same box that the larger organization is but then two you know like as you mentioned just a second ago some of the bureaucracy and the red tape you know just leads to to slow sort of implementation as well and so if you're wanting to to accelerate things I feel like you know or organizations like Sunrise you know allow you to to do that you know readily uh as well and and um you know said you find a lot of a lot of clients that come that that's one of the reasons why they've come to Sunrise

Dave Hibbard

yeah and let me throw in one other thing there too which is um you know sometimes just getting input from a different different you know engineering organization is just to kind of follow on what you're saying right it really allows different thinking right so um I think when you get into a company and you know maybe this is true when I was at metronic as well you're like well this is the way we did product one and this is the way we did product two and now we're going to do the same thing in product three and it's all very incremental uh improvements but when you when you step outside um you know maybe you can get some sort of different out of the box thinking you can get thinking that's um just just hasn't occurred to the development team right because there just looking at the problem the same way over and over again um then sorry what was the second part of your question

Don Davis

yeah I think it's I mean I I feel like it's Innovation and speed are kind of the the two um you know two perspectives that I offer but what I hear you saying is just a third could be just another set of eyes with a truly outside perspective right so

Dave Hibbard

yeah certainly and and so getting back to you know why do people come to Sunrise Labs so you know I think there's lots of different reasons for it right some may be that they just don't have the capacity internally to to do a particular job so you know we particularly we saw that a lot um I think late ‘21 and and a lot of ‘22 um there was just you know particularly on the software side right there was just a shortage of software engineers and um people really were looking to to take aspects of a particular development and move it um or get help right so you know we could do um either the full software development on a product like that or you know sometimes you know we're doing a portion of the software development right like again maybe we're doing an app or maybe we're doing uh a service interface or maybe we're doing um you know the embedded work um while the other company is doing some other portion of the software so there's certainly some of that I think is around capacity and then um you know some of that is I think technical know-how I think you know companies going back to what is a company's core competency um I think you know sometimes they're just looking out to say okay well this is not our core competency it's not a core competency we want as part of our business so let's go find a company that has um that type of skill set and make sure that we partner with them and get a good outcome by not spending our Engineers down a path that is sort of a one-time only path right they want to take their Engineering Group and they want to make sure that their Engineering Group is always continuously improving and learning skills that relate directly to what their product is and what their core is

Don Davis

yeah I think I think that's really important as well so maybe can we pick apart a little bit of the some of the examples of projects that you've been involved in so that people that are you know maybe considering you know hey look maybe this is an opportunity for my company maybe they'll they'll more readily identify you know those those from the examples that you provide

Dave Hibbard

yeah so um Sunrise Labs you know we've really done projects kind of all over the board which is great it's what makes it um it makes it fun and it makes it interesting uh you know again some of the times when I've worked in like a direct product um I'm like okay I really start to get in-depth on the the technology and the therapy um versus you know when I'm working in the services side it's more about you know getting a good variety being able to apply skills across variety but you know to talk about um some of the devices that we've worked on we've we've definitely worked in the last four or five years or so uh quite a bit on some different heart uh pump technologies so we do tend to uh you know work in the more in the class two and class three uh type medical devices and we haven't done a ton of class one but we've done some um we've done quite a bit in insulin delivery as well um so either that's on uh the app side or on pumping side or the combination of them both um done have quite a bit on physiological monitoring um so we have uh you know cardio output monitors and um you know bedside monitors those types of things um image guided surgery so we've done a couple projects on that that's you know that's my background from from back when I was at metronics so that those were certainly getting those projects were you know kind of near and dear to my heart um some on prostate health um you know really prostate ablation so robotic surgery for uh prostate um so also some ivd and over-the-counter type devices so uh Sunrise has worked on you know we had uh some flu um over the counter flu type uh diagnostic systems that ended up during covid pivoting to uh covid diagnostic systems um so that was certainly uh you know an interesting time right so you know one day you're in the office and next day you're at home and you know on Thursday we're working on a device that's over the- counter for flu and on Monday it is pivoting into a covid device so you know it is part of the part of the role to be responsive and look and look what really are the cover the customer needs and as they pivot we you know we pivot with them so you know that's what's great about really having you know good communication good back and forth uh with the client so we're always on the same page with what their what their needs are

Don Davis

very good in terms of the the organization and you know kind of the the the size of the organization at Sunrise Labs how many about how many people do you currently

Dave Hibbard

have uh so the whole team is maybe just under 100 right now um and of that group there's about uh 70 to 80ish uh Engineers um we do as times flex that to a little bit bigger as we need to as additional project uh staff is needed so it really all depends on you know what the what the projects are at the moment um but that's spread across um uh we have a verification group uh we have electrical mechanical software um user centered design and systems um as well as a project management group so we really try to provide a a full service offering um so we can uh really integrate electromechanical devices I think is where we're probably uh best known for

Don Davis

very good and then in terms of the company culture are you seeing um you know uh the the company culture at all shifts as the as the organization's grown or what what has your role been in terms of you know maintaining culture in in Sunrise Labs

Dave Hibbard

yeah that's a that's a great question because it it we have grown right so when I first came to Sunrise Labs we were about 40 people um you know we've with sort of the flexible capacity we've been as high as maybe 110 120 so um you know so there is a big change right as you really get um a bigger group like that the communication gets harder uh gets harder to really have everyone follow consistent process and do things the same way and uh you know one of the other things that gets a little bit more challenging is uh knowledge sharing um so you know at uh Sunrise really try to you know maintain higher Integrity right we're always trying to make sure we understand what the customer's needs are what the customer is looking for you know have you know as the market changes and the customer changes then we're going to change right along with them and we're going to have those discussions uh right with them um you know we really try to involve the customer in so we try and bring the customer into our daily scrums uh and certainly have at the very minimum a weekly status meeting we're going to go over um status and uh you know work that's been done the last week how we're doing financially how we're doing timeline uh but the projects that work the best are the one where we really have the customer uh integrated right so they're in those in the daily scrums every day you know there are there are times where we're working side by side with their engineer um so we may have you know three three Engineers from their team and five Engineers from our team all working on you know similar set of software so uh that makes um makes it really for good communication as well and then the other the other thing that I really try and emphasize uh to the engineers um is that we all have time to help and mentor each other right so no individual engineer has all of the knowledge um so you know as new projects start up there may be someone um that has had experience in something similar or um you know maybe has a similar background with a similar tool set that type of thing so we always want to make sure that um we have the subject manager experts or the reviewers that really have familiarity with that type of project and that type of tool and then maybe the last thing would just be about would you try and um maintain a work life balance right so you know I know that's a little bit of a hotter button in the last five or six years in terms of companies as a whole and you know we do try and do that right so we we want to make sure to me you know having um someone whose you know whole life ends up being about work and they're you know every day they're worried about you know when they're going to get there and when they're going to leave and is this done and that done um you know we want to maintain schedule we want to make sure that uh we're meeting the client's needs but we also want to make sure that uh engineers aren't getting burned out um so we do really try and maintain maintain that work life balance as well as we we go through the project development process

Don Davis

yeah really important really important all across the board especially given you know kind of the current times I you know I still continue to hear you know organizations talking about quiet quitting I still hear organizations talking about you know just how do you you know maintain this balance of letting people you know some people work remotely and some people work you know in person and things like that it's it's a definite challenge that I feel like is more prevalent now just given kind of what we just went through with covid but um you know I I also don't think there's going to be a quick shift back one one direction or the other either so

Dave Hibbard

no I don't I don't think so either we you know we do try and empower our engineers to to make decisions right and you know that's kind of what I was saying a little bit earlier a lot of times people are just coming to me and saying okay this is really what I want to implement or do and it's um you know their but it's their idea and their um really are sort of excited about that particular idea so we do try and empower the engineers to be able to do that um but yeah we've struggled with um you know the hybrid remote right we all went remote and we did it pretty it was pretty harsh right it was like Thursday was discussion Friday it was okay you guys are out take your take your monitors and your computers and go home uh and then you know we didn't really come back for um a good year and a half uh so you know maybe even longer than some other uh some other clients and we we you know I think we worked pretty well you know we we pivoted and worked pretty well remotely um I think actually think the hybrid is a little bit harder um you know particularly when you're you're sitting in a meeting and you have one or two people at home and four or five people in a conference room it's it's just hard to hear it's hard to involve the people that are offsite um so you know we're struggling with that and we're you know we're looking at different options um you know investing in you know different just technologies in terms of video conferencing systems and things like that um to you know having you know we haven't really implemented core days yet but having you know days where everyone's in the office type thing but you know we haven't gone to that yet so we're still we're still feeling it out

Don Davis

yeah there's quite a few clients of mine that are that are on the you know hey look we're on this you know everybody's going to be in the office x amount of days uh during these days if you need to have face-to-face meetings is how you you know kind of arrange that the one thing that I've talked a little bit about is just you know in terms of your overall personal life still has to to flex quite a bit right I mean one working from home is one thing but then whenever you're having to like you know still travel into the office and other things just a little bit more that you have to do in life and it's not like it's a problem it's just something that you have to plan for as a part of your day and so yeah

Dave Hibbard

yeah one of the things that we did do during the pandemic was um we went to a little bit more remote people as well right not just remote working from home but remote somewhere else in the country um and that's been successful for us too right so so you know with the you know video conferencing tools and um collaboration tools you know we use Google a lot we use um you know lots of other tools that are online right almost everything we use is online now um you know it really does feel like someone's there um and you know you we have those people usually come in like once a quarter um and you know spend a week in the office so they really get that face time and get the hallway conversations and you know just a little bit more personal connection but um we've been successful um with people being remote as well

Don Davis

very good and then the the last question I have for you um that that before we get into kind of the the ones that I have that across all of my episodes um is is more centered around leadership advice that you've received given your background you know both in larger companies like metronic and then now you know smaller companies like Sunrise it sound it seems to me like there's a good opportunity to learn some lessons from you here on leadership ship as well and uh something that you might have gained in terms of leadership advice

Dave Hibbard

yeah um that's a great question and I think um you know I I have seen lots of different leaders and lots of different styles over the course of my career and you know there are you know you see the good and the bad right you kind of see it all um so you know one thing there's a few things that have really stuck with me one is someone said this to me really early on because I started managing people early on but you know don't ask people to do something that you wouldn't do right so to me this is like sort of a straight up ethics and um you know having good ethics and making sure that everyone in the team has good ethics you know that's just like a foundational guiding principle right it's non-negotiable um and this you know for a company like Sunrise I think this really extends into doing what's right so you know there are projects never go perfectly right um you know I wish I could always say like you know we started at Point a and in the concept and then you know three months later we were shipping the product and there was never an issue but um you know there's always things that come up and um we always want to make sure that we're you know communicating with the customer understanding the risks um and making sure that we're making decisions together right and we're not you know we're we're just being honest and open and always trying to make sure that um sorry um what the customers needs are is really uh what we're trying to accomplish and that's the best interest of what we can do I think for long-term partners ship with people we we want them to come back for more work and you know that I think to me is having you know good integrity and um good communication with them um and I would say a second one is really you know in terms of leadership I think when I was you know a young fresh out engineer I expected the leader to be like well you're gonna do blank and you're gonna do blank and you're gonna do blank right uh but it's much more about just making sure that the the team has the opportunity the skills and the resources to work together right they're they are going to do the right thing you know you just you know they may go off on a tangent because they thought that was the right thing and that's where you got to step in and maybe say okay well that's not really the end goal here the end goal is a little bit more this way um and just kind of correct the team but you know they are they're the ones that technically Savvy they know what's going on in the project they know what's going on they're intimate with the the software and the hardware um so it's really just you know are elegant and meet the customers needs

Don Davis

yeah absolutely important so David there are three questions that I like to ask every guest what inspires you

Dave Hibbard

um yeah so um one of the things that that really inspires me I think it's just knowing that you know working in the medical device industry and and that's what I've been doing my whole career just knowing that the products that I work on are out there to to make people's lives better you know so I had um you know I've known people that have you know had image guided surgery done on them for back right and you know I'm like yeah that's a product that I work on I feel proud um that you know that's able something that I was able to contribute and you know there are certain devices that maybe intersect a person once right so again the image guided surgery or you know surgery is hopefully one of those right you it's not something you want to have over and over again um and there are other devices that I've worked on that are therapeutic right so there's something that needs to be used every day or a couple days a week you know this kind of gets back to the paral dialysis right now really you know as thinking about the the patient and the end user needs you know uh looking at sort of the human factor side of things has been something that's always been a passion for me as well um so you know the parangal dialysis is something that you know takes I don't know half an hour 45 minutes to set up before they go to bed you know they're they're lying in bed with this you know box sitting next to them with a uh air pump in it so it's making noise all night it's moving fluids in and out there's valves going off right so how does someone sleep with that and how do they deal with that um and you know really going through some of like the formative studies and seeing users um really trying to set the system up it it gave me a great appreciation for just how challenging it can be you know even for a trained clinician some of the devices can be challenging but particularly for you know someone in like a home use environment uh it's really really can be um you know it's just it's just eye opening right and and there's a couple couple examples um that I have that one is I was in a form of a study for a again as parital dialysis and we had a patient come in that was in a wheelchair and there's lots of you know when you're on um dialysis there's lots of comorbidities that go along with it right and this guy this particular patient was suffering um from ailments in his feet right so he's in a wheelchair and you know here we are with um bags of dialysate right so he's got to be a be able to carry them right so he's putting them on his lap and Wheeling across the room and you know um then we have a cassette that has four or five different tubes coming off of it and you know he's running over the tubes with the wheelchair and you're just like oh my God like how is this really going to work and get set up so you know that was one that it really was kind of eye opening to be like okay it really is a wide range of patients um and the other one that would really was kind of funny to me was kind of early on in my career it was uh me and another guy were both you know in the six-footish range right and we had developed Fage guided surgery a new uh like heart-based camera system and uh we were all proud of it right and we brought in the the marketing person and kind of showed them how we could you know tilt the camera and aim it and get it in over the patient and you know this was like a a five foot five woman and you know she looked me in the face and she goes built by men for men and I'm just like oh boy some things to rethink here you know so so that you know that side of it is really kind of stuck with me um so you know making sure that we're taking care of the patient designing good devices um for the patient and really just making people's lives better that's really what kind of brings me into the office and inspires me um

Don Davis

also important yeah what concerns you

Dave Hibbard

yeah so the my concern and my uh excitement are actually GNA kind of be the same topic and it's uh it's artificial intelligence so um you know it's artificial intelligence obviously has been around for a while but you know there's lots of new tools that came out really in a lot of them in the beginning of this year and you know from a development company standpoint right there's the question is how do we use AI to make ourselves more efficient right so you know can we use AI to fill in code step it's you know there's tools like co-pilot and things like that that we're investigating now um to to Really you know do some of the maybe the repetitive coding tasks right so if you have like a a case statement or enum or something like that right and you want to fill in like 20 different cases then let the let co-pilot do that for you um it's probably actually things right and you know how can we use um AI to like improve the robustness of our code right so you know one of the things that we've been looking at lately is you know can we you know if someone writes a a function or you know a whole module right can AI kind of read that back and say this is what I think this code is doing and um does it agree with like how we think it's supposed to work right so can it help find anomalies quicker can it help resolve them quicker and can it help um some of the engineers you know dive into an area of expertise that maybe they don't have um so so that's one side of it um and I think there's a lot of great uses for it right it's it's kind of becoming more and more ubiquitous right like even as you're typing a a email right right you know starts filling in the text for you right guess best based on what you've done in the past so then you know when you look at okay what what concerns you about it it's really you know it's again it's AI has some concerns right can it be used in a harmful way either intentionally or unintentionally right can you um unintentionally violate um intellectual property rights by you know having some snippet of code written or you know where where is that code coming from um you know who wrote that is there copyright on it right that that type of thing is is a concern um you know does the engineer really understand the output of maybe they got of some code snippet of AI in terms of its performance and what it's really doing um and you know so that takes you know you need to make sure you're doing good code reviews you need to make sure you're doing good testing but you can't test in quality right so you need to really understand you know what that has done for you in terms of it in terms of developing some getting back correct um and uh you know you can type in questions into chat GPT and you you know you get an answer back and you're like no that's we know that's wrong right so you know that's concerning right so if you're not a subject matter expert how do you know if that's right or wrong right so you have to take whatever you get and do research on it and then you know can or is it being used for more nefarious purposes right to make you know better viruses and things like that um and you know the other the other part of it that I think is sort of an interesting subject and and is like in sort of in the educational system right so um you know as Internet you know first came online right you know it's like okay well how do how do we educate people um in a way that's useful for the future right you know when they first came out it's like oh my God you can't right can't look up anything on the internet right and then it was you know smartphones smartphones came out again it's like every you know everyone has to take their smartphone and put it in the bin in the front front of the classroom right and then you know it became more how do we integrate that technology you know into the classroom in terms of you know when my son went through high school they had Chromebooks and things like that right so so you know I think AI is going to be the same way right you know it's yeah you can take and get some sort of term paper or whatever written um by AI you still need to have the the background and the understanding to know what was in there and be able to talk about it and defend it and and believe what you know you've actually created and to be don't know how to use those tools to again to sort of be more efficient in the future and so it's it's kind of both right you know when we when I look at AI overall I'm like oof this could be great and oof this could be could be very interesting

Don Davis

yeah I just think I mean in addition to AI for the coding side I just think of low code no code tools right and and um at least for somebody like me I mean I I did some coding in college but it's been years and years and occasionally there's something in the back of my head where I'm like it would be nice to have a tool that could do this and now the the whole that whole idea of doing it you know is is a lot less work than uh than it used to be at least for somebody like me so that even I could do it um if you were to ask me though at a at a lower level you know do I know you know where the greatest gaps are in the code or are there risks with different aspects of it I would have you know really no I no overall idea I would have to go to some somebody else that's much more has much more expertise and background in it and I almost wonder in that same light right because I my comment to my wife about chatGPT and the things that I see is I I think goner the days or lesser in the future will be the days of sitting and worrying over every word in an email for two hours or half a day you know whenever it's a lengthy email that you're having to like construct for somebody and worried about their reaction or whatever um um more or less because chatGPT can do it you know pretty quickly and a lot of the results are okay um you know you can kind of sit there and read it and go okay so what do I think the reaction to this is going to be uh a little bit more versus spending all your time trying to construct the perfect sentences to get your idea across um and so I I kind of wonder if there won't be in the future a point where we look back and go we lost something because of this you know kind of like we do with smart tones smartphones and technology today where we say look that this idea of personal connection is somewhat lost right I mean we we lose something by having so much electronic communication but at the same time I mean it's much more efficient than calling everybody and talking to everybody individually so yeah

Dave Hibbard

yeah yeah I totally agree right I mean it's it's kind of similar when you talk about the hybrid work um you know there's just a human connection that comes in when people are in the office and know talk to them joke with them and that kind of stuff and it it also gives you I think a lot more sympathy um to what someone else may be going through right they're struggling to finish some code or finish some design or uh and you know I think you're just more willing to jump over there and be like hey let me help that help you figure that out and get that done so yeah I think there's a lot of benefit to the to the inace and in human connection and hopefully we won't lose that as uh we go forth and new technologies come about all the time

Don Davis

so I want to make sure I I think I heard you correctly but I just want to make sure so you you were combining what concerned you and what excites you together correct I just want to make sure I didn't Circle back around there wasn't something else that you wanted to to share with our audience um before we conclude

Dave Hibbard

yeah but that is correct I you know it's it's on both sides yeah

Don Davis

yeah I I completely agree that I think I think AI has its benefits I also think um there's a lot of really exciting things that it can do uh um for me you know especially whenever you know I'm limited in certain things it's like look I I could leverage it for this and uh and and you know create a picture and two minutes that has you know every aspect that I was looking for in it it would be one example at this point in time so yeah well David thank you so much for

45:1 being here thank you so much for being on the life science success podcast and for sharing with us about Sunrise Labs I great greatly appreciated our conversation and uh yeah wish you all all the success in the future

Dave Hibbard

oh thank you yeah I've enjoyed very much the conversation so thank you for having me on

Don Davis

thanks a lot