National Institutes of Health
*Turning Discovery Into Health*

## All About Grants Podcasts

David Kosub: Hello, and welcome to another edition of NIH's All About Grants. I'm your host, David Kosub, with the NIH's Office of Extramural Research. NIH recognizes that for us to achieve our mission of improving public health, while reducing illness and disability, we must support an array of research activities. This includes the earliest phases of fundamental discovery, all the way through fostering a potential technologies movement into the life science market through our small business programs, like SBIRs and STTRs. But, to this latter point, when some innovators try to move their products into the commercial space they face many barriers when trying to do so. Well, that's what brings us here today. We have with us Dr. Ethel Rubin. She is NIH's Entrepreneur in Residence and enjoys speaking with our small business community about facing these barriers, such as how to find private investment and pitching to potential investors. Thank you very much for being with us.

Dr. Ethel Rubin: No problem.

David Kosub: Well, before we begin and hear more about that all-important investor pitch, Ethel, let's hear your pitch. What is an Entrepreneur in Residence and how exactly do you help our awardees move their products into the market?

Dr. Ethel Rubin: An EIR helps NIH-funded companies bring their technologies to market primarily by bridging the gap between technology innovators and the finance and business development worlds. I've been on both sides of the table myself, raising funds for my companies and on the corporate side, creating strategies for growth and investing in new therapies and diagnostics.

David Kosub: Well, now that we have a better understanding of what an Entrepreneur in Residence actually does, what do our awardees need to know about private investment to continue their work post-award?

Dr. Ethel Rubin: Well, grants and contracts are non-dilutive financing. By that I mean that federal grant funders, like NIH, who will fund companies through the set-aside SBIR and STTR grants, do not end up with any equity in your company. Or in other words, federal funders will not take ownership in your company which would dilute the amount that the original funders had, so that's really great. Private investors, on the other hand, will take equity or ownership in the companies that they invest in, which of course, will dilute out the founders and anyone else who may have been the first money in to get a technology developed, typically friends and family.

David Kosub: So, if I was a small business biotech entrepreneur and I was trying to get private financing, how would I know I'm actually ready to do so? What are the things I should be thinking about?

Dr. Ethel Rubin: An entrepreneur should begin thinking about their funding strategy at the very earliest stages of company formation. The budget for each product should be forecasted out to significant commercial milestones, or at least out to five years and should be taken into account when considering

where the financing for your product development will come from. A product that needs $100,000,000 to develop may require a very different strategy than one which can get to market with $5,000,000.

David Kosub: Well, now that we've considered some funding strategies, who exactly are these private investors anyways? I mean, our research community is likely aware that they can apply for grants through the federal government or a nonprofit organization, for example, but who should they go to seek private investment in the biomedical space?

Dr. Ethel Rubin: You may have heard about VCs, also known as "Venture Capitalists," Angel investors and corporate VCs. But there are always new players who come onboard, such as venture philanthropy, crowd funding, affinity groups, and private equity funds.

David Kosub: Can we touch on the most common ones first, the VCs and the Angels?

Dr. Ethel Rubin: Sure. Well, VC firms in the life sciences raise capital from large institutional investors such as pension funds that have to be deployed in a very short amount of time and yield significant returns in a few years. They typically invest multi-million dollars in more mature companies which have completed significant work and are beyond what we call "seed stage," although a few very well-known VCs will specialize in early stage companies and there are still a few that will actually spin out companies from academia or others and provide management on their own. Angels, on the other hand, are usually private individuals or wealthy family offices who invest in private companies. They typically provide less funding than VCs, say about a million dollars or less, on companies with lower valuations; I would say $3- to $4-million valuation by the time they approach the investors, what we would call "$3-4 million pre-money valuation." They typically invest early in a technology's development, and thus, assume the most risk. So, expect terms in these deals that are similar to what you would see with VCs.

David Kosub: And what about those new players in the game that you mentioned?

Dr. Ethel Rubin: Well, new to the game is what we would call "crowd sourcing" or "crowd funding." Crowd funding platforms enable accredited investors from the public to participate in private financing deals. But before pitching on these platforms consider reviewing the Angel Capital Association's website for a description about regulations that a private company must be aware of when making public solicitations. Finally, there are also venture philanthropy and evergreen funds. These investors do take equity in companies they fund but distribute their returns like a philanthropic foundation where it's given back to the organization to make further deals.

David Kosub: Sounds like there's many potential avenues to peruse. How can our innovators find these investors to help continue supporting their research?

Dr. Ethel Rubin: Oh David, unfortunately there is no one way to find these investors, but an EIR can help you with this. As I mentioned before, the first step is doing the homework to figure out which investor-type is right for you. There are luckily databases that have a wealth of information about who is investing in what to give you an idea of the right group to approach. I would say that these are probably most useful for VC-led deals. Angel investors, on the other hand, are probably the most organized. The Angel Capital Association that I referred to before has listings of Angel groups across the country and beyond. It's still your responsibility to find out which group is active in your technology area, but at least there's a central website to ask questions or for entrepreneurs to search for information. Most of the Angel groups will have

online forms to fill out so that investors can assess if your sector, your business model or your technology is a fit. But still today, there is nothing like a personal introduction. Best advice is to network as much as possible and ask for referrals from other people in your network and ecosystem. These will include serial entrepreneurs that you might know, economic development groups in your region. And by the way, there is a state-by-state listing on the NIH SBIR website under "Resources." You can ask at your local incubators, technology accelerators, the Office of Tech Transfer if you're an academic spinout. If you've got a board of advisors they might be a good, useful source or academics with successful startups that you might know. There's a lot of outreach, networking, and homework that you must do to find the people you'll want to be talking to about your company and technology.

David Kosub: Well, it sounds like it's all about the money, but I assume there's much more to it. Like, for example, what's going on in an investor's mind when one of our entrepreneurs may approach them, especially when it comes to building on the investment that NIH has made in their research?

Dr. Ethel Rubin: It's no secret that investors are looking for technologies that address critical unmet needs, have a large market, a reasonable path for getting to that market for a reasonable investment under the leadership of a great management team that includes both business and technical expertise, and can exit, either by being sold to a larger corporation, or less likely today, public listing, in a reasonable amount of time. With all that in mind, different types of investors will typically invest in different stage companies, different technologies, and at very different levels, as I mentioned. It takes a lot of homework to figure out which type of investor to approach. You really should be researching the various funds and groups, look for past patterns, size of investment, stage of company at the time they made their first investment, and any of their recent exits to help you align your funding strategy appropriately. In addition, unlike times past even those who invest in early-stage technologies wouldn't consider putting money into a company with nothing but a concept. They will want to see, even at the seed stage, some evidence supporting the rationale or any progress that you've made towards a product which can be strengthened, for example, by your NIH SBIR award and get some significant proof of concept work completed before making an investment. It might not be worth reaching out to investors until you're well on your way to de-risking the technology in this way.

David Kosub: All right. Now it's time for the fun stuff, that all-important investor pitch. Ethel, I'm sure you've been approached many times by innovators who have tried to pitch you on their product's potential benefit to treat a medical condition, let's say, but they're having difficulty explaining it clearly and succinctly to folks outside the lab. What should they do? How can you help them with their elevator pitch?

Dr. Ethel Rubin: Well, first think about your audience. I cannot emphasize enough that this is not a presentation at a scientific conference. This is all about the market, the addressable market and the return on the investment for the investors. Find out how much time you actually have in front of the different investors you're meeting with and make it count. Find out who's in the audience, what can be sent ahead of time. This will help you quickly home in and be prepared for possible questions. We really want to know what your product is, how does it address the unmet need, what is the size of the market, not just the number of customers you can get or patients you can treat, but how much the total revenue from the different customer segments is in dollars. Again, focus on the business aspects of the company and how you plan to hit commercial milestones, not the scientific aspects. The science should really be brief and to the point and, ideally, in your backup slides in case the discussion veers in that direction. Also, have planned how you think your company is going to exit and how you will provide a healthy return to your investors; that's what they ultimately need to know. Again, 90 percent of your technical stuff should be in

your backup slides. I've also posted a couple of blogs in my LinkedIn profile highlighting what I've seen in my many years of pitch coaching CEOs in the Life Sciences. You can see recommendations for a seven-minute pitch that you can do in fewer than 10 slides.

David Kosub: Let's actually jump into some of those right now. Based on your experience what would you say are the most important ones?

Dr. Ethel Rubin: Well, at the end of the day, again, investors will want to know what you'll be using their cash infusion for and how long that cash will last until you need a next round of funding, if at all. They want to see you get to what we call "valuation inflection points" which can include things like regulatory clearance or completion of clinical testing with the money that you are asking them for. You need to have a strategy for your first product, you need a product development and a great management team, a reasonable path to market including regulatory and reimbursement, and a way to hold the market with an intellectual property strategy. These characteristics are what make a company a worthy investment. These things delivered in a clear and compelling fashion will capture investors' attention, be believable, and exude credibility.

David Kosub: Definitely some good food for thought. Now, what about for afterwards, what should folks be thinking about to follow-up with their investors after they've given their pitch?

Dr. Ethel Rubin: I always suggest that you try to have an understanding of each group's or fund's process so that you know what you should do next, ideally before leaving the first meeting. Your follow-up may simply be a thank you email, or it could include action items that the fund is requesting. Try to understand the timing of each step of their process and when it's best to get in touch next. Each group or fund is different, so don't be shy to ask them.

David Kosub: Great. Any final thoughts you'd like to leave with our listeners about perfecting their pitch?

Dr. Ethel Rubin: Keep a positive attitude about the process, and I know this is hard. This is really important because it could take 12-to-18 months and many interactions to raise the capital you need. By doing your research ahead of time, approaching the right types of investors for your company's stage and valuation, and with the right targeted pitch for your technology, you'll be better prepared for more positive responses. Also recognize that you may not meet the big-wig executives, like the managing directors or fund partners from the outset. But that's okay too. You may interact with associates for the fund who are the eyes and ears of the higher-level people. These are the people who may do a lot of the market research and financial modeling for your technology and other aspects during the due diligence process. Consider those folks your potential champions, capture their imagination when crafting your concise and compelling pitch and you'll be well on your way.

David Kosub: Fantastic. Thank you very much Ethel for this discussion. Greatly appreciate your time. And for those interested, please do visit her LinkedIn profile for some additional tips and tricks. You may also look for a video on the National Heart Lung and Blood Institutes website which you might find interesting as well. Just search for "NHLBI Small Biz Hangouts: Perfecting Your Pitch." This has been David Kosub with All About Grants. Thank you.