# SBIR Proposal Writing Basics: Important Considerations In Your NIH Proposal

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We know some of you are working diligently to submit your Phase I or II proposal to NIH for their September 5th deadline, and wish you well. Besides always encouraging NIH applicants to submit several days before the deadline (because of frequent issues with using the grants.gov submission system and/or its interaction with other variables like SAM), we want to make sure you are considering the following:

Do you want to lose money? Would you like to write NIH a check at the end of your NIH SBIR/STTR project that equals the losses you are going to incur? Yeah, we thought that would be your answer. But many NIH recipients are losing money because they are not correctly pricing their Phase I or II proposal. So, before you wrap up your NIH SBIR/STTR proposal, please consider:

1. NIH caps you at 40% indirect rate if you are a Phase I newcomer. Remember, you can (and should, unless you want to lose money) bill NIH for the actual cost of doing the Phase I R&D (called direct costs), plus a share of your costs of being in business (called indirect or F&A costs) plus a modest fee (more on this later). The norm is to express your indirect cost allowance as a percent of the direct costs (all or just direct labor—more on this later). If you do not have an indirect rate approved by some Federal agency, NIH is going to only allow you a rate of 40% or less. REQUEST THE 40%. It is likely much lower than your actual or anticipated indirect costs.

1. NIH allows you to request higher rate if you have one or it is a Phase II. As we said above, you are stuck at a 40% indirect rate at NIH if you are a newcomer to Phase I and don’t have an established or approved rate. But if you have recently negotiated an indirect rate with any Federal agency, then you can use it in your NIH proposal. Or, if this is a Phase II NIH proposal, you can ask for an indirect rate that you feel will more accurately reflect your true costs of being in business while you are working on the NIH Phase II project. The difference between 40% and this accurate indirect rate can be tens of thousands of dollars (maybe even more!), so request the accurate rate! NIH will want to discuss/negotiate that rate, but with a little homework you should have ample justification—and it is worth it to avoid losing many thousands of dollars, isn’t it?

1. That 40% rate is on all direct costs, not just direct labor. If you are stuck with the 40% indirect rate because you are a Phase I newbie, or you shy away from negotiating an accurate rate on your Phase II (remember, you’ll be losing tens if not hundreds of thousands of dollars if you do this) and stick with the 40%, remember this: the allowed 40% indirect rate should be calculated as a percentage of ALL DIRECT COSTS not just direct labor. The difference can be huge: let’s say you are bidding a Phase I with $100k in direct labor and $50k in other direct costs (like a subcontract with the university, supplies, and project related travel). Then 40% of only the direct labor is $40k, whereas 40% of all direct costs is $60k. So, if you ask for 40% of only direct labor, you will lose $20k towards the costs of keeping your small business afloat. Now, beware that NIH sometimes wants to only give you the indirect rate on all your direct costs except they want to limit it to the first $25k of a subcontract (referred to as “modified total direct costs” or MTDCs). So, in our example above, let’s say that the university subcontract is $45k. If NIH plays the MTDCs game, then they would only give you 40% indirect of $100k direct labor + $25k subcontract + $5k other direct costs or ($100k+25k+5k)\*.4=$52k, or $8k less than what you would get if they allow the 40% on all direct costs. Unfortunately, you don’t know in advance if they will play the MTDC vs all direct cost game, but if you are only requesting the skinny little 40% indirect rate already, it’s more likely that they will allow you to have it on the whole subcontract because they know they are getting a bargain on your NIH project.
2. In addition to the 40%, you can request <35% for direct fringe. This is a lesser known allowance that you can often get from NIH, even if you are capped at the 40% indirect rate because you are a newcomer. Fringe is a compilation of things you think of as fringe benefits (vacation, holidays, sick leave, health or life insurance), and some things you may not think of (especially the employer’s portion of payroll taxes—the employer’s match on FICA and Medicare, and state and Federal unemployment taxes). Because your employees earn some of these fringe benefits when they are working on projects like the NIH grant, you can treat that portion of fringe as a direct cost. Note the 2nd to last column in Parts A and B of the grants.gov form is where you would show this on your NIH budget. You would derive a fringe rate (a %) and use it to plug in here a direct fringe allowance for each employee. That rate depends on what fringe benefits you offer your employees and your unemployment tax rate and base (varies greatly by company and state), but one example we use in our SBIR cost proposal workshop would put the total at about 20%. So let’s use that fringe rate with our example above to see the impact of asking for a fringe benefit rate in addition to the 40% indirect rate that NIH is willing to give us as a Phase I newbie: We had $100k direct labor, so we’ll now add in 20% more for the fringe benefits earned while our employees are working on the NIH project: ($100k\*.2)=$20k, and when we tack on the 40% indirect rate, we get $20k\*1.4=$28k. So, just by adding in some of our fringe benefits as a direct cost, we have increased the justified budget for our NIH project by a total of $28k. See how quickly these dollars add up?
3. ALWAYS ask for the 7% fee. In addition to the costs of doing your NIH Phase I or II project (remember, these are called the “direct costs”), and some allowance for your general costs of being in business (indirect rate), NIH and all other SBIR/STTR agencies will consider your request for a fee or profit. This is generally capped at 7% of the subtotal of direct and indirect costs, and is the last thing you add into your budget before totaling it up. ALWAYS ask for the fee, because there are no restrictions on its use, which means this is the most flexible money you will ever get from an SBIR/STTR agency. It can be used as a contingency on the project, to buy equipment, to hire the kinds of commercialization assistance that you may need but NIH doesn’t want to pay for, or even to give your employees a nice bonus at year’s end.
4. NIH has increased its Phase I & II budget “limits” to give you more room. OK, so how are you going to fit all these costs into a skinny little NIH Phase I budget? Well, we can help here, too. First, make sure you are not one of the shrinking breed of Phase I applicants asking for $150k for an NIH Phase I grant. Virtually no one is doing that anymore, and NIH understands it—they recognize life science R&D is expensive, and realize you can’t do much with $150k. Second, don’t feel constrained by even the $225k that many NIH Phase I applicants have been requesting lately. The $225k number came from NIH being allowed to exceed the old $150k “cap” by 50% (obviously the $150k “cap” was a very soft one). But NIH, like several other SBIR/STTR agencies including DoD, are saying that the $225k is outdated because of inflation, and are allowing a higher limit to reflect those increased costs. The number NIH is using these days is $252k on a Phase I grant. Beware that some NIH components may set their maximum at something less than this, so it’s always smart to contact the institute or center that might fund your project to make sure they are Ok with this $252k amount. But let’s assume your Institute is Ok with $252k, and let’s see how our example stacks up against it. Remember, $100k direct labor, $50k other direct costs, 20% fringe rate, 40% indirect rate, and 7% fee: ($100k\*1.2+50)\*1.4\*1.07 = $255k. So, we’re just over the $252k cap. We can fix this in one of two ways. First, we can trim back some of our direct costs so we get down to $252k (and because any direct cost gets multiplied by the 40% indirect and 7% fee rates, a minor tweak in a direct cost can lead to a dramatic drop in overall costs). Second, we could check to see if our project might be submitted under one of the hundreds of topics that NIH has gotten exempted from the $252k cap, per the list at <https://sbir.nih.gov/sites/default/files/NIH_Topics_for_Budget_Waivers.pdf>.

One final word of advice: don’t over propose your NIH SBIR/STTR project. Some applicants, when they hear that NIH will fund a Phase I project up to $252k, start envisioning and then scoping a $252k technical effort. But what did our example just show? For a total budget of $255k, after modest fringe, indirect and fee rates are considered, there is only $150k available for the actual Phase I R&D. So, scope your project (your direct costs) to fit what is available after accounting for these other fringe, indirect and fee costs. If you don’t do this, then we will ask you once again,

Do you like to lose money?