NIH SBIR Grants
Applicant vs. Reviewer

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Only a platform to share experience

• The collective behavior of a random group of reviewers is unpredictable
Before Anything Else....

- **Product development vs. Academic idea**

- Well conceived product
  - Important, exciting, creative
  - No “quantum leap”
  - Fully convinced?
  - Theoretically feasible
  - Patentable
  - 2\textsuperscript{nd} opinion
Next Step....

• Thorough understanding on the subject
  - Familiar with the literature

• Commercial potential
  - Viability in the marketplace ?
  - Competitive advantages ?

• Uncomplicated path to commercialization ?
  ▶ Freedom to operate
Reviewers’ Perspective.... (1)

- Mostly academics
  - Conservatively creative / innovative ?!
  - Want to see theoretical feasibility

- Experts in the area
  - Familiar with the literature
  - Individually / Collectively
Reviewers’ Perspective…. (2)

• Want to see a marketable product
  - Unique, realistic with demand
  - IP front secured
  - Deploy to marketplace < 5 years

• Applicant’s creditability
  - Track record of publications and IPs
  - Entrepreneurial experience
Before Writing a Proposal....

• Intellectual property status
  - Patent, provisional patent, licensing, etc.

• Existence of a business entity
  - Register, DUNS, EIN, federal ID, etc.

• Team / Logistics
  - Collaborators / Subcontractors
  - Infrastructure, resources, IACUC, IRB
Planning a Proposal....

• Prepare a solid proposal
  - Good science vs. Wishful thinking
  - Commercial potential: in writing
  - Roles of all participants

• Propose to do what are realistic

• Pitfalls: pre-empt arguments
The Proposal

• Specific Aims
• Background & Significance
• Preliminary Studies
• Experimental
Specific Aims

• Be concise and realistic
• Limit the objectives / simplistic terms
• Clearly define the goals
• Exercise moderate “salesmanship”
  - Not an academic grant
Background & Significance

• Avoid irrelevant information

• State commercial potential
  - Market information (be realistic)

• Company information
  - Personnel
  - History, products, IP
  - Physical location
  - Commercialization experience?
Preliminary Studies

• Not required
  - But included by all applicants

• Very helpful to show some feasibility
  - Relevant pilot data

• Do not overdo it
  - More may not be better
Experimental

• Propose studies commensurate with:
  - Time span (6 months)
  - Budget ($100K) (flexibility!!)

• Good science

• Realistic / Achievable
Summary

• A good idea
• Prepare a solid proposal
• Cover all the administrative aspects and logistical issues
• Make the proposal looks neat
• Hope for the best
Administrative Issues (1)

• Budget
  - Clear justifications
  - Indirect cost, fixed fee

• Budget Justifications
  - Precise and accurate
  - Instruments (include vendor quotes)
Administrative Issues (2)

- Animal protocol
  - Approved (include an IACUC #)
  - At least pending

- Human subjects
  - Include children, women, minority, etc.
  - Justification need, otherwise
  - Reviewers instructed to use it as a criteria to score grants
Administrative Issues

- Status of the applicant
  - 51/49 rule
  - Academic: a support letter

- Resources
  - Access facilities, equipment
  - Fee-for-services
  - A support letter to access instruments
Administrative Issues (4)

• Outsourcing to companies
  - Subcontractors’ letters of commitment
  - Type of work and dollar amount

• Academic collaborators
  - Letters of commitment
  - Clearly define roles
SBIR Grants

• A mechanism to fund high risk startups
• For product developments