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- Kentucky Commercialization Fund

- SBIR/STTR Grant Program
  - Federal SBIR/STTR Grants Program
  - KY SBIR/STTR Matching Funds Grants
KSTC Mission and Functions

To strengthen the capacity of people, companies and organizations to develop and apply science and technology and compete responsibly in the global marketplace.

KSTC is an independent, non-profit company founded in 1987

www.kstc.com
Stages of Innovation and Investment

- Basic Research
- Applied Research
- Tech Transfer / Start Ups
- Start Up Capitalization
- WC Infusion
- Rural Innovation Fund
- Kentucky Enterprise Fund
- Kentucky Commercialization Fund
- Kentucky Innovation Network
- Successful Venture
- Product Rollout
- EPSCoR
- Kentucky Science and Engineering Foundation
- Kentucky Commercialization Fund
- Education

Time

www.kstc.com
CPE ------- KBE Programs ------- OOE

- Kentucky EPSCoR

- Kentucky Science and Engineering Foundation (KSEF)
  - R&D Excellence
  - SBIR/STTR Phase Zero and Phase Double Zero

- Kentucky Commercialization Fund
  - Commercialization of university technology

- Kentucky Enterprise Fund (and Rural Innovation Fund)

- Kentucky Innovation Network
  - 13 Centers
  - Central HQ at KSTC

- SBIR/STTR Matching Funds Program
  - Phase I
  - Phase II

- Kentucky New Energy Venture Fund (KNEV)
Funding in Research Focus Areas

- BIOSCIENCES
- ENVIRONMENTAL and ENERGY TECHNOLOGIES
- HUMAN HEALTH and DEVELOPMENT
- INFORMATION TECHNOLOGY and COMMUNICATIONS
- MATERIALS SCIENCE and ADVANCED MANUFACTURING
Kentucky Science and Engineering Foundation (KSEF) Goals

• Proactively Fund Home-Grown, Peer Reviewed Research Ideas that Lead to:
  ✓ Excellence in Science and Engineering
  ✓ Publications in Reputed Journals
  ✓ National and International Recognitions
  ✓ Accelerate New R&D Collaborations
  ✓ Increase Fund Generating Capacity to attract Follow-on Funding
  ✓ Train Students and Post-doctoral Fellows
  ✓ Capture Innovations in Intellectual Property / Patents
  ✓ Technologies with Commercial Potential

• Enhance Capacity of Organizations and People to Successfully Compete at Federal Level
# Kentucky Science and Engineering Foundation: KSEF

<table>
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<tr>
<th>Program</th>
<th>Purpose</th>
<th>Funding</th>
<th>Eligibility</th>
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<tr>
<td>R&amp;D Excellence (RDE) Program</td>
<td>Funding for: Up to $50,000 per year</td>
<td>University faculty and entrepreneurs</td>
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<tr>
<td>Emerging Ideas</td>
<td>Research leading to advancing basic knowledge</td>
<td>Small tech businesses</td>
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<tr>
<td>Emerging Technologies</td>
<td>Research leading to developing a technology</td>
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KSEF: Application and Approval Process

- Letter of Intent submission – PI and Co-PI Information, Research project title and abstract, Key words and Reviewer’s areas of research expertise and interest
- Three-tier Administrative Review of LOI
- LOI not meeting the deadline, and not complying with eligibility and or format are not invited to submit full proposals
- Accepted applications are subjected to an established peer review process involving national and international subject matter experts
- Three-tier approval of recommendations for grants
**KSEF: Reasons NOT to Invite an LOI**

- Late receipt (based on electronic time stamp)
- PI having an active grant on full proposal due date
- PI/Co-PI having submitted more than one LOI (all LOI are disqualified) or having received three or more grants in last five years
- The proposed work is a continuation of previously funded KSEF project (to PI/Co-PI/Collaborator)
- Proposal for infrastructure development or not based on stipulated R&D scientific work
- PI/Co-PI not in compliance for timely reporting
- Incomplete LOI sections and/or abstract contains more than 300 words
- PI ineligible to apply
- Fewer than, or lack of, five key words and five areas of research for potential reviewers
KSEF: Reasons for Disqualification of a Submitted Full Proposal for Peer Review

- Late receipt (based on electronic time stamp)
- Failure to submit the application by omission
- Proposal exceeding the page limit (eight page technical)
- Failure to include cited references in the list
- Failure to follow the required proposal format (font size, spacing, lines per vertical linear inch, margins, etc)
- Inclusion of legible figures in the text
- Failure to comply with a scientific proposal format and missing sections = submitting a poor quality product
- Failure to submit proposal within the scope of RDE program
- Exceeding total page limit of 22 pages (printed PDF)
- Submitted proposal is different than the accepted LOI
- Failure to submit signed cover and budget pages within two working days
Kentucky Commercialization Fund (KCF) Goals

Purpose: Help Universities in Commercializing Promising Technologies by Providing Funding to Move Pre-screened Successful Research Technology from Lab to the Marketplace by its transfer out of the university either to a new start up or to an existing business.

Funds are provided for:

- Market opportunity assessment
- Technology valuation
- Commercialization plan development
- Technical or business consultation*
- Testing and validation of technology*
- Intellectual Property (IP) protection upon exhaustion of university funds

* Through sub-awards
## Kentucky Commercialization Fund: KCF

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<tr>
<th>Program</th>
<th>Purpose</th>
<th>Funding</th>
<th>Eligibility</th>
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<tbody>
<tr>
<td>Kentucky Commercialization Fund (KCF) Program*</td>
<td>Investment for commercializing the university developed technologies</td>
<td>Up to $75,000 per year; not to exceed $150,000 over two years</td>
<td>University faculty</td>
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<td>*2x Payback required upon technology commercialization</td>
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KCF: Application Process

• Pre-proposal submission – Technical feasibility, market need & commercial viability, among others
• Face-to-face (or phone) interview with each PI/Team
• Only selected applicants get invited to submit a full proposal (Assessment letter from the university for commercialization of the technology is required)
• Applications will be subjected to both technical and business reviews by an external peer review panel
• Award Agreements are to be signed within 45 days
KCF: Reasons NOT to Invite a Pre-Proposal

- Late receipt (based on electronic time stamp)
- PI/Co-PI having submitted more than one pre-proposal (all pre-proposals may be disqualified)
- The proposed work is a continuation of previously funded KCF project (to PI/Co-PI/Collaborator)
- Pre-proposal for basic research, early-stage applied research or infrastructure development
- PI/Co-PI not in compliance for timely reporting
- Incomplete Pre-proposal sections and/or length greater than seven PDF pages
- PI ineligible to apply (post-doc, adjunct faculty)
- Fewer than or lack of five key words and five areas of research for potential reviewers
- IP status not clearly stated or results widely published
KCF: Reasons for Disqualification of a Submitted Full Proposal for Peer Review

- Late receipt (based on electronic time stamp)
- Failure to submit the application by omission
- Failure to submit signed cover and budget pages within two working days
- Failure to attach a letter from OTT or pertinent office regarding university ownership of the technology, IP status, and associated commitment to commercialize the technology
- Failure to follow the proposal format (font size, spacing, lines per vertical linear inch, margins, etc)
- Inclusion of legible figures in the text
- Failure to comply with a scientific proposal format and missing sections = submitting a poor quality product
- Failure to submit proposal for the stipulated tasks
- Submitted proposal is different than the accepted Pre-Proposal
SBIR/STTR Funding Program
Federal SBIR and STTR Program

Phase I:
Feasibility, 6-12 months, $150K

Phase II:
Prototype Development, 2 years, $1M

Phase III:
Commercialization – Non-SBIR/STTR $$$
Subcontract under SBIR vs. STTR

• **SBIR**: Small business is required to perform –
  - Phase I: $\geq 67\%$ of R&D work
  - Phase II: $\geq 50\%$

• **STTR**: Small business collaborates with a non-profit research institution and performs -
  - For both Phase I & II Small business: $\geq 40\%$
  - Research Institution: $\geq 30\%$
Funding Implications For Research Institutions

Maximum dollars available (from $150K / $1M grant) per project:

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<th>Ph I</th>
<th>Ph II</th>
<th>Total</th>
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<tr>
<td>SBIR</td>
<td>50K (33%)</td>
<td>500K(50%)</td>
<td>550K</td>
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<tr>
<td>STTR</td>
<td>90K (60%)</td>
<td>600K(60%)</td>
<td>690K</td>
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Plus potential commercialization royalties through licensing arrangements.

Source - Robert Berger Consulting
How Faculty Can Participate in the SBIR/STTR Programs

1. Partner with a small business
2. Via faculty member’s company, while faculty member stays at university
3. Via faculty member’s company, while on leave of absence from university

In all three, the faculty member can initiate the process, find topic, write proposal

Source - Robert Berger Consulting
Kentucky SBIR/STTR Program

Pre-application Assistance

• Phase Zero Grants (three grants per calendar year)
• Double-Zero Grants (three grants per calendar year)

State Funded Matching Grant

• Maximum five Matching Grants per Company
SBIR/STTR Phase Zero/Phase Double Zero (PZ/DZ) Grant Program

Purpose: Enable small businesses and faculty entrepreneurs to prepare a high-quality, competitive SBIR/STTR Phase I or Phase II proposal for any of eleven participating federal agencies.

SBIR/STTR Phase Zero Grant (up to $4,000)
SBIR/STTR Phase Double Zero Grant (up to $4,000)
PZ/DZ: Multiple Application Submissions

- Maximum three Phase Zero grants /calendar year: maximum total NTE $8K
- Maximum three Phase Double Zero grants /calendar year: maximum total NTE $8K
- Only one Phase Zero or Phase Double Zero grant for developing a specific SBIR/STTR proposal/idea

Details at http://ksef.kstc.com and www.kysbir.com
Kentucky SBIR/STTR Matching Funds Program

Program Initiated and Funded by CED-OOE since 2006:

- Provides matching funds for both SBIR and STTR Grant awards

  - Phase I
    - Matches up to 100% but not to exceed $150,000 for exploration of technical merit or feasibility of an idea or technology

  - Phase II
    - Matches up to 100% but not to exceed $500,000 per year for 2 years to support full-scale R&D and business-related tasks

Details at http://www.kysbirmatchfunds.com
Kentucky Knowledge Based Economic Development Programs

For complete details, visit following websites:

- http://www.kstc.com
Useful Websites

• KSTC and KSEF Websites
  http://www.kstc.com
  http://ksef.kstc.com

• SBIR Websites
  http://www.sbir.gov
  http://www.zyn.com/sbir

• Kentucky SBIR/STTR Resource websites
  http://www.kysbir.com
  http://ksef.kstc.com
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<tr>
<th>Name</th>
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Questions?