CF-AIR Workshop April 18, 2018

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GRA: A unique public-private partnership of research universities, industry and government





What is GRA?

- 501(c)(3) non-profit organization
- Program funds from State of Georgia via The Board of Regents
- Operations funded privately
- Board comprised of business and academic leaders
- Mission: Stimulate innovation-based economic development and create jobs
- Coalition of the State's research universities
- Unique organization not available in every state
- GRA Venture Fund, LLC



WHAT WE DO:

Propel new kinds of growth for Georgia's economy

HOW WE DO IT:



1. Expand research capacity at universities



2. Seed and shape new companies around inventions, discoveries



3. Accelerate growth of the best start-ups





67 GRA Eminent Scholars

- average **h-index of 50** (compared to **45** for National Academy members)
- Last 5 years: **193** patents, **270** provisional patents and copyrights
- Over \$500 million / year in research grants to Georgia
- Scholars employ some 1,200 faculty, graduate students and technicians in their labs





- Venture Development: 150 startups, 1,500 high-value jobs
- Outside venture capital invested: **\$1 billion+**







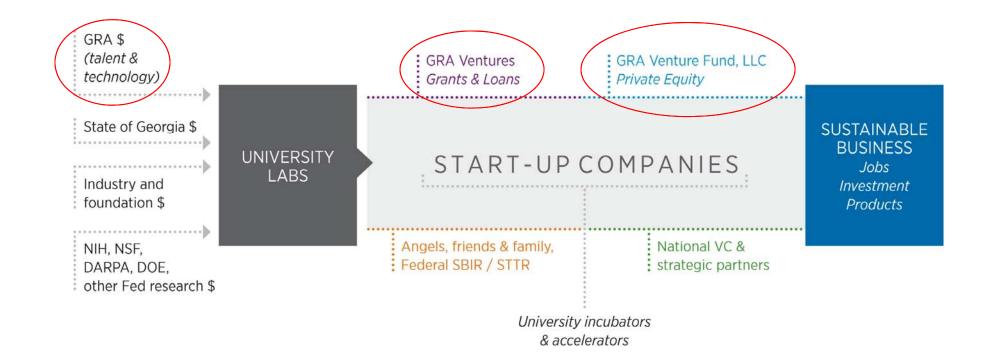
Accelerating growth of the best start-ups

- 600+ employed
- Outside venture capital invested: \$473 million+



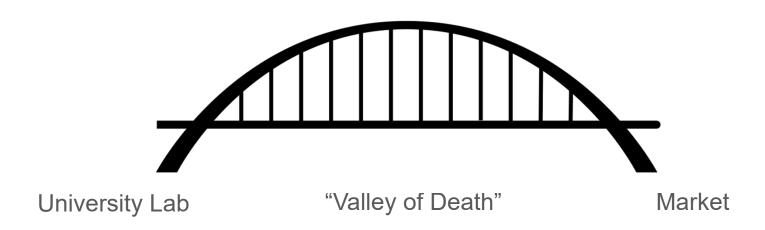


The Ecosystem of University Research and Entrepreneurship



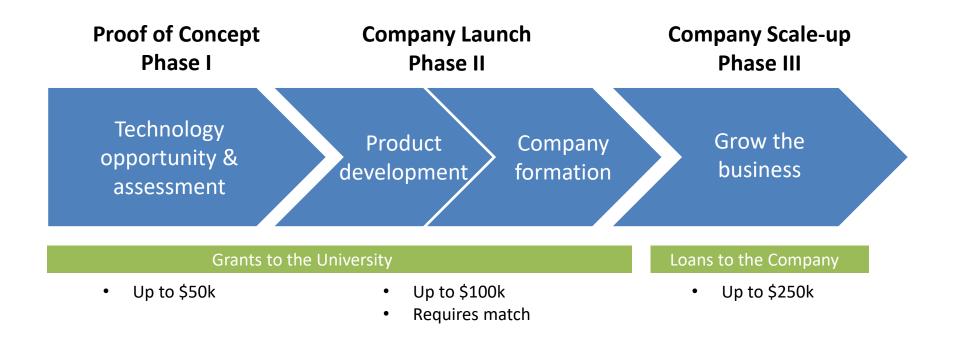


Bridging gap from research to market





GRA Venture Development Phases





How does GRA's Venture Development program work?

- University representatives at each institution identify opportunities and help faculty design and implement a development plan
- Assessment includes:
 - Intellectual property
 - Technical feasibility
 - Market dimensions and dynamics
 - Funding feasibility
 - Regulatory and reimbursement issues as appropriate
 - Management requirements



Risk-based approach to technology development

- Identification of risk factors
- Prioritization of risks
- Risk mitigation strategy and plan
 - Characterized by rigid flexibility
 - Go-no/go decision based on milestones; as early in process as feasible/reasonable
 - Define critical development path
 - Always involves measureable milestones that will merit the progression from one stage to the next



What are we looking for?

- Faculty, staff or students that have novel university-owned technology (invention disclosures)
- In areas from A-Z
- Entrepreneur mindset
- Willing to work with mentors, advisors, a management team



Proposal and process

- 1st step: 2 page pre-proposal brief description of technology, IP and goals for Phase I
- 2nd step: GRA meeting/conference call with faculty/team and Kevin/Patrick
- 3rd step: Submission of a Phase I proposal
- Proposal is internally and externally vetted
- Proposal is/is not approved
- Continue through Phases I and II



What makes a strong/compelling proposal?

- Must have university IP or strong potential for university IP – initial data
- Large market and strong value proposition
- Business model is clear technology or platform can support a stand-alone company employing more than 1 or 2
- Novel not easily reproducible, have done a prelim look into prior art
- Have thought about what regulatory hurdles may exist
- Team skills match requirements for development
- Faculty willingness to work with industry experienced management
- Addresses most crucial milestones first "fail fast or succeed"



GRA Ventures Stats

- Reviewed over 500 unique technologies
- Awarded 950 grants and loans to 400 companies/projects
- Invested over\$35 million
- 1500 high-value jobs created
- \$170M million generated in company revenues last year
- Over \$1 billion in outside equity investment
- 150 active companies/projects in portfolio



Benefits to Emory/GT University faculty

- Access to corporate networks for potential partnerships/customers
- Access to network of entrepreneurs and potential CEOs
- Bring know-how to deal structure and execution for investment
- Growth capital (GRAVF)



How do you participate?

- Emory Meet with Kevin Lei or Patrick Reynolds, Tech Transfer Office
- Georgia Tech Meet with Harold Solomon, VentureLab
- Submit invention disclosure to university
- Submit pre-proposal



Case Study

- Phase IA prototype
- Phase IB feasibility animal studies
- Phase IIA formulation
- Phase IIB 13 week GLP tox study
- Phase IIC 26 week GLP tox study
- Phase IIIA Loan Optimize drug formulation; pilot batch manufacture
- Raised venture capital
- Initiated clinical trials



Thank you! More information at gra.org



Georgia Research Alliance