Varian Medical Systems



Overview of Grants Program

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Why External Research Is Important

Outside researchers can

- Provide clinical perspective to product requirements
- Provide global perspective to product requirements
- Work with clinical data in a clinical environment
- Gather medical evidence that a new technology or treatment technique has clinical benefit
- Create prototypes and demonstrate proof of principle before we begin internal development
- Attack a problem we don't have time, resources or expertise to attack



Research Grants Strategy

Support researchers and projects aligned to Varian product development roadmap and business strategy

- Create new technologies and intellectual property
- Improve Varian product features and capabilities
- Advance the clinical implementation of new technologies
- Expand Varian's knowledge base

Identify projects for translation into products of commercial value to Varian

Support clinical trials that expand the use of radiotherapy



Research Grants Managers

Manage Research Grants Program

Roughly 150 projects worldwide at about 70 institutions

Act as middle man between customers and product development teams

Communicate research results to experts in Varian

Manage intellectual property resulting from research projects

Manage research visits to Palo Alto, Baden, Helsinki, etc.

Protect against kickbacks, bribery and corruption

- Grants are not gifts
- Grants are not a reward for past, present or future sales
- Research must be legitimate and have value to Varian



Historical Snapshot

About 150 projects worldwide About 70 institutions

Distribution of institutions

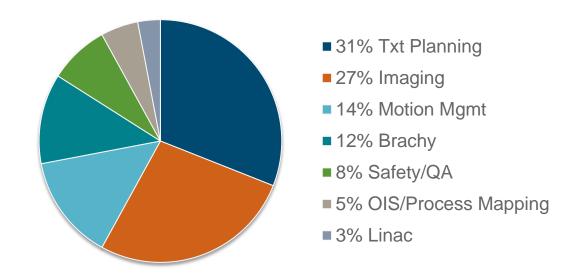
54%	US
25	Europe (incl. India)
6	China, Japan, Korea
12	Canada
3	Australia



Distribution of Topics (pre-2013)

150 projects

- 35% Clinical
- 65% Technology



Clinical Studies

Clinical studies can be expensive Funding is limited

- We must be strategic about which studies to support
- Preferred clinical studies aim to do one of the following
 - Provide information about benefits of RT to patients
 - Grow the pie of RT patients
 - For example, evidence that SBRT lung is comparable to surgery in stage
 1 operable NSCLC
- Evidence of clinical benefit of new technology
 - Justify reimbursement and/or justify cost of the technology



Grant Application Form

- Clinical impact statement
- Specific aims
- Research Plan
- Duration
- **Milestones**
- Deliverables
- Budget
- In-kind loan request
- Other resources requested
- 10. Value to Varian
- 11. Value to Radiation Oncology
- 12. Pre-existing intellectual property
- 13. Use of human subjects



Varian Research Collaborations Program

Investigator-Initiated Research Grants

As the world's leading manufacturer of medical products for treating cancer and other conditions with radiation. Varian Medical Systems searches continuously for new advances in radiotherapy, radiosurgery. brachytherapy, oncologic imaging, and other areas related to our core business. Funded through the Varian Research Collaborations Program, grants awarded to innovative researchers in healthcare and academia provide Varian with access to novel developments in technology and key data on emerging trends in cancer care.

Applications to the program are accepted throughout the year. The Varian Grant Review Committee meets three to four times per year to review applications and decide on funding.

To apply for a research grant, please complete the attached application.

The Grant Review Committee places a high value on having research milestones and deliverables clearly defined in the application. The milestones and deliverables are important because they describe what Varian can expect to receive in exchange for support of your work. Additional information on the grant application process can be found on our website at

http://www.varian.com/us/corporate/research_programs/research_grants.html

If your funding request is approved, we will work with you to develop a Research Agreement that details the terms of the award. After hardcopies of the Agreement are signed, the project officially begins, and the first payment is made on your award. Progress Reports typically are required twice per year, and a Final Report is required upon completion of your project.

Varian's Research Collaborations Program complies with US federal regulations that govern research funding provided by health care manufacturers to health care providers. The Program also complies with the National Electronic Manufacturers Association (NEMA) code of ethics on interactions of electronics manufacturers with health care providers. Please see the NEMA website for details (www.nema.org).



Application Process

Proposals accepted year-round

Grant Review Committee meets as needed

- Roughly 12 to 20 proposals per quarter
- Internal review and scoring
 - Input to Grant Review Committee (GRC)
- GRC decides which proposals to approve
- Approval rate is low
- Majority of grant applications are not approved



Previously Approved Grants

Historically, we provided the following to support projects having a signed research agreement

- Funding: Graduate students, postdocs, statisticians, etc.
- In-kind loans of research tools
 - Hardware and/or software in support of a project
 - No equipment or installation costs
 - Used ONLY with the approved project
 - Could not be used for other projects
 - Typically, limited to NON-CLINICAL use
- Limited access to confidential information.
- Limited access to technical experts



Successful Projects

Previously approved projects share common elements

- Developed over time with Grants Manager input and multiple revisions
- Strong technical scores from internal experts
- Aligned with Varian roadmap and strategy
- Demonstrated a clear value to Varian
- Clear Research Plan
- Well thought out Milestones and Deliverables

They also answered the following questions well

- What is the clinical significance? Why is the project important?
- How will patients benefit?



Research Agreement



15+ page contract2 to 12 months negotiation

- Bi-Lateral legal protection
- Intellectual property
- Confidentiality



