



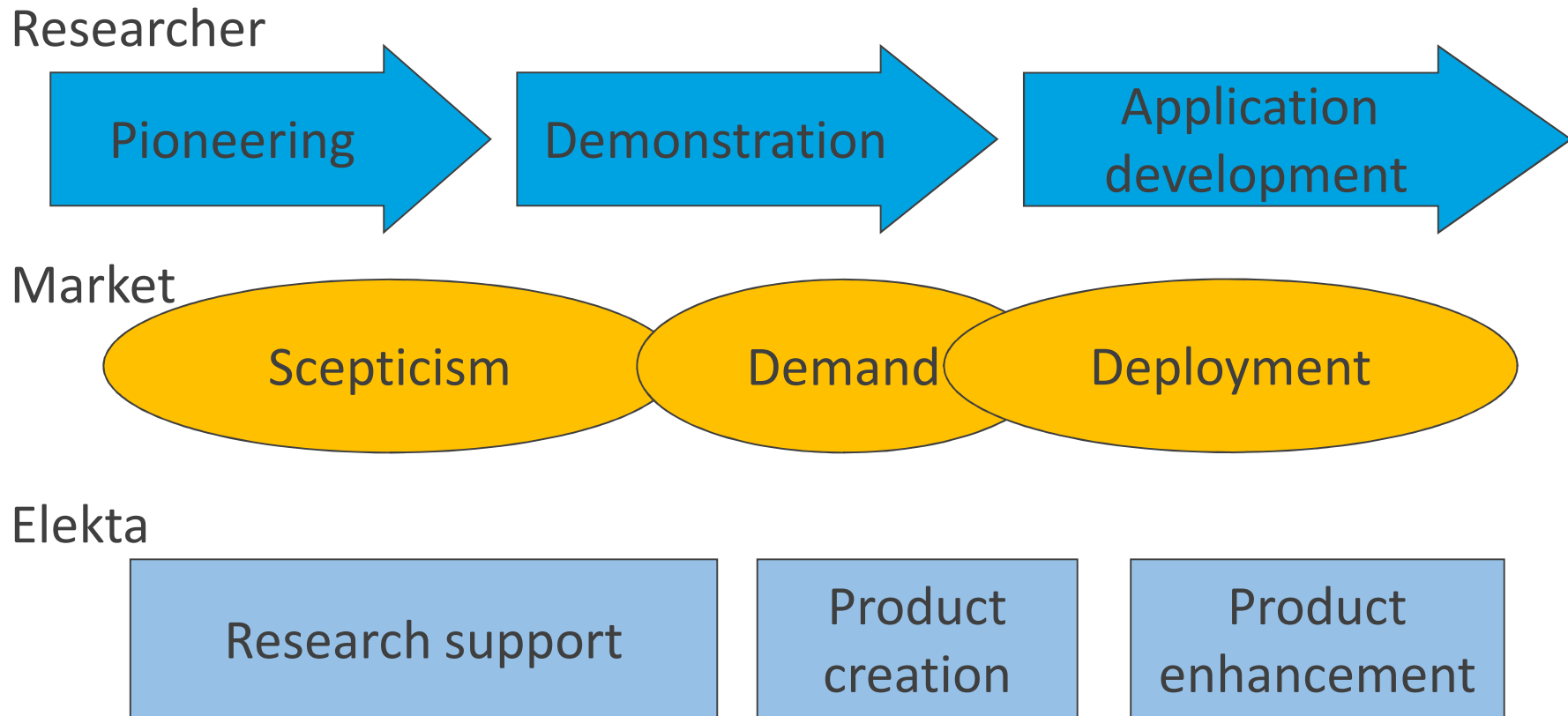
Research and collaboration

Kevin Brown

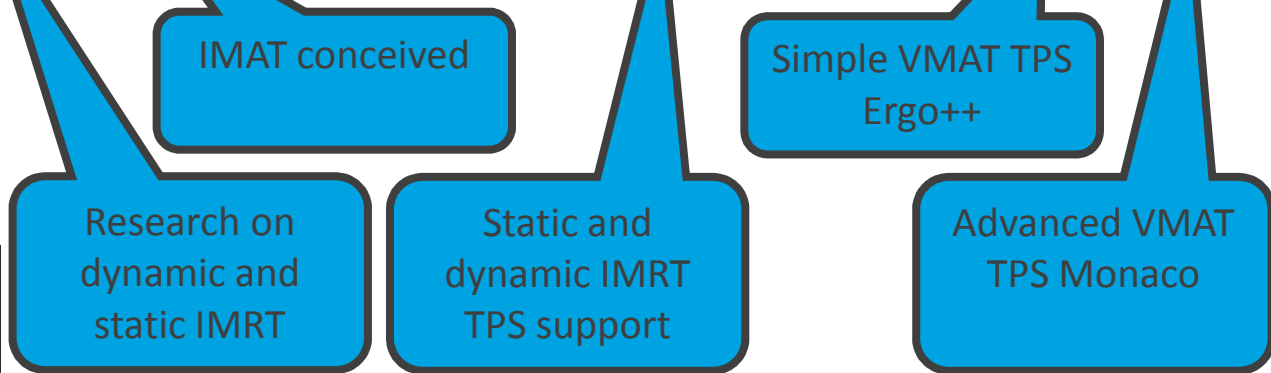
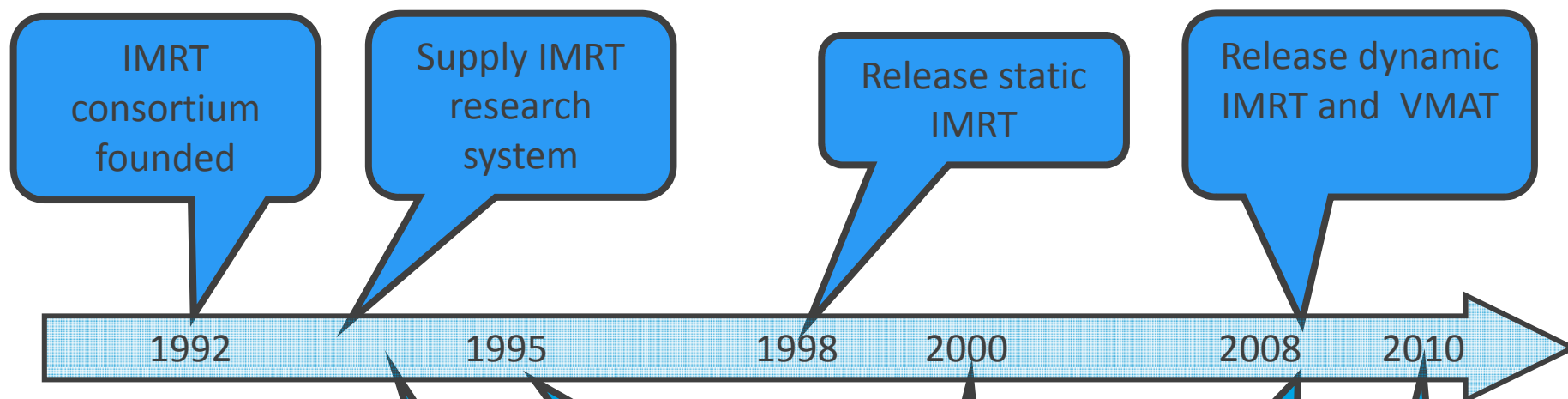
Global VP Scientific Research



A collaborative research lifecycle



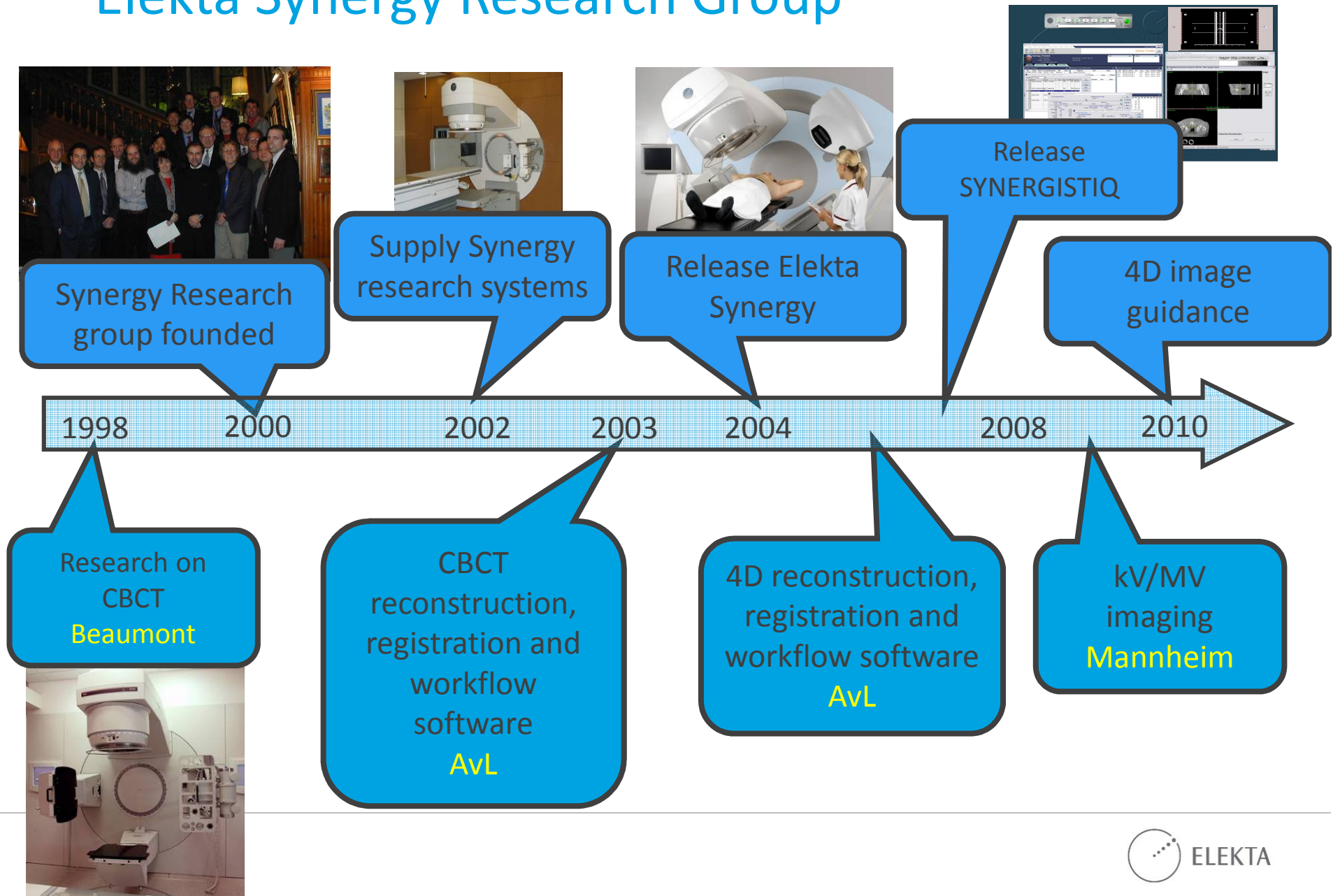
Elekta International IMRT consortium



Global Consortium Members:

- William Beaumont Hospital, Detroit, Michigan USA**
 - Image guided verification
 - IMRT/VMAT treatment delivery
- Thomas Jefferson University Hospital, Philadelphia, Pennsylvania USA**
 - Patient immobilization
 - 'Step & Shoot' delivery techniques
- University of Maryland, Baltimore, Maryland USA**
 - Integrative design
 - Intensity Modulated Arc Therapy
- University of Washington, Seattle, Washington USA**
 - Clinical integration of IMRT
 - IMRT delivery in large treatment fields
- Christie Hospital, Manchester, UK**
 - Validation of dose models
 - Simple class solutions
- Royal Marsden Hospital, Surrey, UK**
 - Reverse treatment planning
 - Delivery optimization, 3D - gel dosimetry
- Netherlands Cancer Institute, Amsterdam, Netherlands**
 - Dose standardisation for IMRT
 - Dose verification using merge volume imaging
- Universitätsklinikum Tübingen (UKT), Germany**
 - Biological modelling
 - Dose optimization
 - Monte Carlo calculations
- University of Gent, Ghent, Belgium**
 - IMRT protocols for dose escalation
 - 3D - gel dosimetry

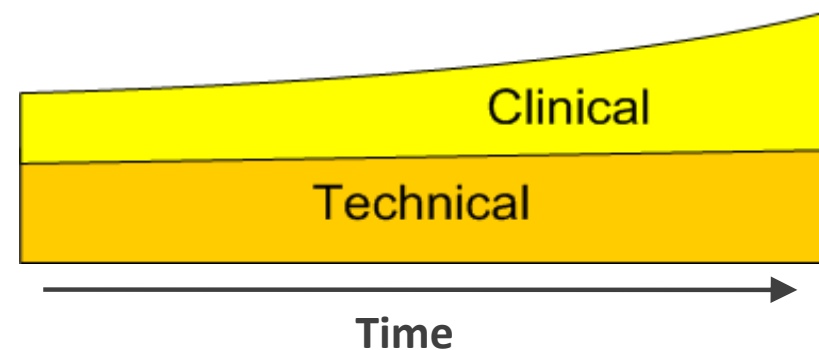
Elekta Synergy Research Group



Evolution of Research Consortia

Increasing Clinical Focus

- Elekta Synergy[®] Research Partnerships
 - Lead to development of Synergy[®] Systems
 - Served as model for other technology research groups
- Recent medical, technical, financial and political trends
 - Clinical focus required to better align with trends
- Disease-based clinical research groups formed in response
 - Started 6 years ago



Clinical consortia

Key opinion leaders advancing care through research

Lung SBRT, Spine SBRT, Pediatric, Nasopharyngeal carcinoma (NPC), Liver SBRT, Oligometastases SBRT

- Internationally renowned cancer institutions
- Respected and prolific research physicians and physicists
- Prestigious and visionary Elekta customers

Sharing and developing clinical evidence

- Promoting inter-institutional international research collaborations
- Expanding clinical indications for advanced technologies like SBRT
- Building clinical evidence
- Improving clinical outcomes



Range of collaboration possibilities

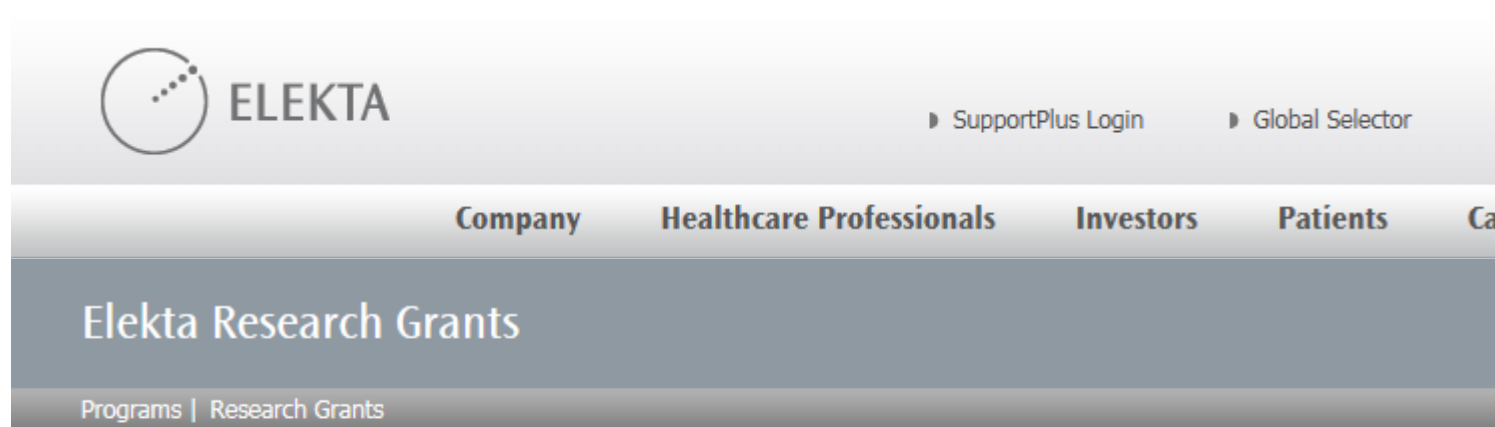
- Hosting customer visits
- Running peer to peer Education courses
 - Technical and Clinical
- Presentations and travel
- Pilot site/early adopter/publications
 - Testing released material
- Application Research
 - New applications of released products
- Technological Research
 - New technology i.e. unreleased material

Research collaboration support

- Support for publicly available grants
 - National and regional
- Access to new product features
 - Evaluation and testing
- Research tools and material
 - Access to restricted research interfaces
 - Unreleased material to facilitate customer research program
- Direct Elekta Research Grant
 - Limited number of tightly managed research projects
 - Often associated with matching funding from National Funding Bodies

Elekta Research Grants

Go to Elekta.com and search for Research



Elekta Investigator Initiated Research Grant Application

General Information

Elekta has a long and rich tradition of supporting investigator initiated research that leads to advances in technology and clinical care. We depend on close collaborative relationships with investigators who are themselves leaders in their respective fields. These relationships and the results of our joint research efforts are among the keys to our success and leadership in our industry.

In order to maintain the highest standards, we have formulated a process to guide applicants through the research application. This process is intended to result in a well-defined and high quality research program that is mutually beneficial.

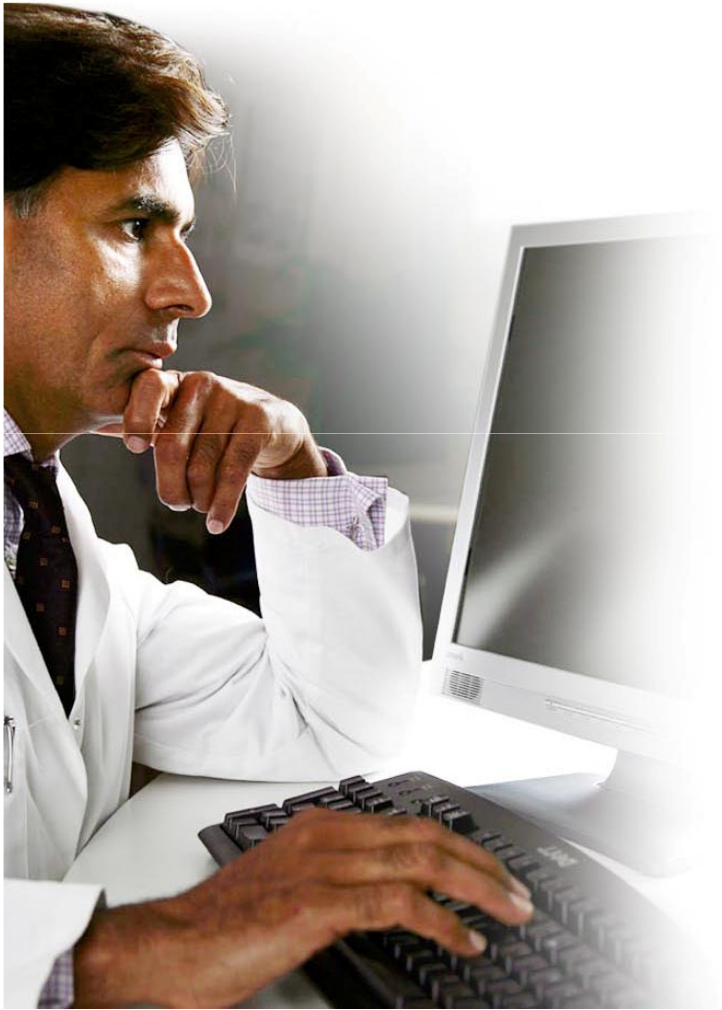
Research Review process

- After the application is submitted
- Members of the Elekta Research Review committee are allocated to review the application
- Their reports are considered and then a member of the committee will report back to the applicant
- Either
 - The grant will be approved, possibly with a delayed start
 - Suggestions might be made to make the project more attractive to Elekta
 - The grant will be rejected

What are we looking for?

- Researchers with a demonstrated track record of innovation
- Clearly thought out research project
- Clear deliverables
 - Can be updated as the project progresses
- Benefit to Elekta through advancement or application of our products
 - This is often the tricky one
 - For you to be able to make a meaningful contribution you need to fully understand our products and future roadmap
 - It has to be something that we are not already doing
 - This usually means that you will not be ‘strangers’ to us
 - You will already be involved in deep discussions with us about the future possibly at a level of detail that requires an NDA

Elekta ...



...goes beyond collaboration seeking long term relationships built on trust with a shared vision to deliver clinical advances that improve patient outcomes.