

Research in Estonia

ETAG_Report_2012



Research in Estonia

Executive Summary

Science and research in Estonia is human scale. “In Estonia, you can work for results rather than process and do it with people rather than systems.” This is the key benefit and lasting value, which can be advertised and communicated in Estonia and abroad.

Before any international communication is undertaken, we will gather success stories from various scientific fields and publish them both online and offline in an Estonian Science Yearbook. Through case stories we highlight real achievement instead of future opportunity. This puts the human scale achievements in the context of hard science.

The case stories will be gathered from the leading universities and will be rewritten into human language. Easy to understand material is much more likely to be shared through Facebook, as well as used ad-hoc by anyone, thus greatly extending the reach of Estonian scientific achievement than is possible with specialist jargon.

The target group is threefold: young, ambitious doctoral and postdoctoral students who are looking for an opportunity to make their mark on science; public audience at large to introduce Estonian scientific achievement and corporations, to raise their awareness to the possibility of doing research projects in Estonia. Each target group is more likely to make field specific, rather than country specific, searches. Therefore, the material must be clear and understandable so that relevance is determined quickly.

The material will better spread and be more believable, if it comes from an official source. The identity of Research in Estonia must be “national” rather than corporate. To differentiate from all scientific material, we’ll avoid use of photography in favour of caricature.

Communication will be done mainly using online tools, with offline and events used to drive traffic to websites. The key event locally will be the compilation and publishing of the Estonian Science Yearbook.

The goal of Research in Estonia

Raise the awareness and image of Estonia in the European scientific context, specifically taking into consideration Baltic Sea and neighbourhood policy;
facilitate the development of high-level scientific contacts among developed science nations and emerging markets;
increase the cooperation between science and industry.

Conditions, a.k.a. the brief

The target group is defined as doctoral and postdoctoral students, scientists, foreign investors and international public opinion. The foundation of Research in Estonia is “Study in Estonia,” which introduces Estonian higher education worldwide, and “Welcome to Estonia” visual identity rules.

Brand Manual tasks in the context of the above

1. Define the brand of Research in Estonia. Herein we must understand both the desired image result as well as what can realistically be communicated, which the country and its universities can reasonably deliver. It is crucial that what is communicated abroad is also believed at home.
2. According to the above definition, the brand can be described. Through brand positioning, personality, moodboard and copy style.
3. Based on the description and definition, the visual identity can be developed, which supports the aim of the brand and its communication.
4. The communication strategy and plan, based on the above, centered on the ETIS.ee web portal and database. The marketing plan is developed in modules, some activities of which are independent of the each other and can thus be postponed, if budgets don't allow implementation.



Defining Research in Estonia

Estonian science and research has never been marketed in an organized manner. There is no coherent archive of achievement, case studies, stories or presentations to use for underpinning marketing. It is, however, important to focus Estonian scientific marketing on communicating the width and breadth of Estonian scientific achievement, rather than just opportunity, facility and community.

Achievement provides credibility for doctoral and postdoctoral students to come to Estonia as well as for companies to consider cooperation with Estonian research facilities.

Furthermore, conversations with foreign scientists in Estonia have clearly demonstrated that invitations to come to Estonia, participate in research projects or to study are always personal, made peer to peer.

As with all communication, the key for successful dissemination of messages is that all participants, all stakeholders of the message believe and support the concept. This can be compared to internal communication within a company: if employees are all versed and supportive of the company's goal, then they will also help multiply the impact of communication by individually sharing information using both offline and online tools. However, where marketing stresses good service but internal communication and values do not, the result is always disappointment.

We must facilitate communication, not lead the conversation.

Consequently, our challenge is not in publicising Estonian scientific achievement, but rather in gathering coherent case studies and stories, which support the desired positioning of Estonian science in the international community. To do this, we must organize the Estonian scientific community to provide and support the communication, which they can themselves distribute later on, peer to peer. The brand of Research in Estonia is made up by the achievements of Estonian science.

e-everything
tigerleap
pragmatic
innovative

team focused
empowering

Estonian science and research

inter-disciplinary
meritocratic

tartu
tallinn
european union
nordic



Brand positioning

The brand or Research in Estonia is defined by*:

Location	Known for	Estonians are	Work method
Nordic	e-everything	Team focused	Interdisciplinary
EU	Tigerleap	Empowering	Meritocratic
Tallinn/Tartu	Pragmatic Innovative		

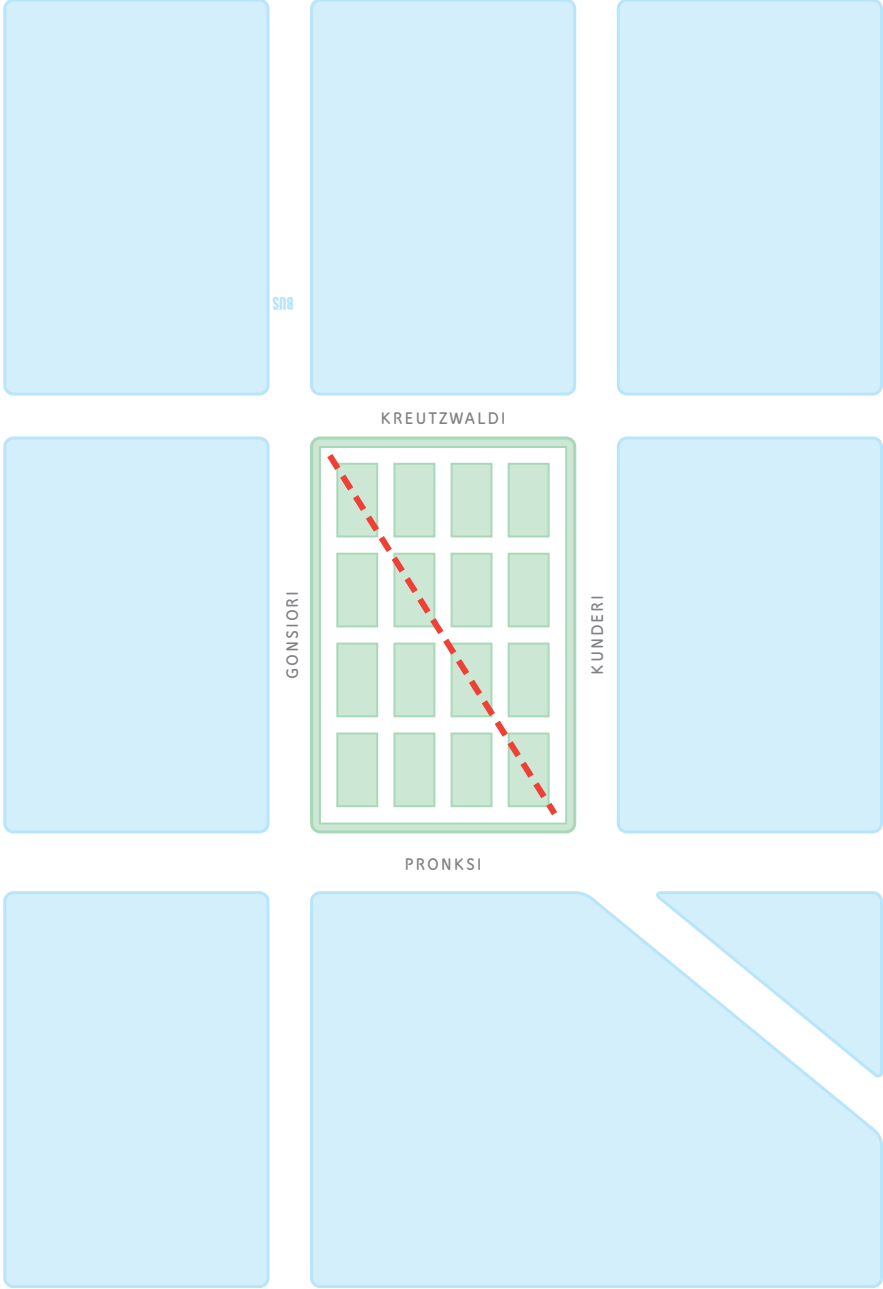
In communication, the environment and location of Estonia must play a minor role, while how working in Estonia with Estonians is, must be stressed. Estonian social achievements are to be included only as reference, but the aim is to avoid justification of Estonian size, relative wealth, historical and political background and so on.

Estonians are palpably apologetic in conversations with foreigners. By focusing on achievements in science, which are arguably world class, the issue of Estonia is defused and rendered irrelevant in the context of Research in Estonia. The virtues, which need to be stressed are meritocracy, interdisciplinary work, a focus on teams and individual empowerment, which all adds up to making Research in Estonia human scale.

Doing science and research in Estonia is empowering and involving. Cooperation with peers, institutions and administration is direct and supportive without layers of bureaucracy to blunt the senses. This is true, because science and research in Estonia has a proven track record and willing spokespersons, in the form of both local and foreign scientists, who in interviews gladly confirmed the ease with which one can focus on work and forget about politics.

* The definitions of the words are given in the brand positioning document.

There are two ways to lay a path:
1) the way we want it
2) the way people use it
There's only one way that the grass doesn't get trampled



Target group

The target group is defined as doctoral and postdoctoral students, scientists, foreign investors and international public opinion. If the communication were between country and these target groups, then it would be enough to develop believable communication and start advertising.

The definition of the target is based on conversations with institutional representatives. Whereas the political focus of the communication are:

- foreign scientists, with aim of increasing their interest of cooperation and/or engaging in research in Estonia;
- foreign public opinion at the national decision making level, with aim of improving the image of Estonia as science nation;
- foreign investors, with aim of increasing private funding of research projects;

then the communication focus must still be on foreign scientists, as all international scientific cooperation happens at an individual level through personal contacts.

Interviews with foreign scientists in Estonia confirms that invitations to study or do research are individual, made peer to peer. There is no institutional invitation. Therefore, what Research in Estonia says or does cannot differ from what people talk about amongst themselves. The only way to ensure coherence of message is to talk to “them” first.

As the diagram suggests, to get the scientific community to quote Research in Estonia, Research in Estonia must first quote them.

In the long-term context of promoting Research in Estonia, Estonian scientific achievement and infrastructure, the key target group is and will always be the local scientific community. It is in their minds, that Estonian science and research must be important and relevant: to them, their careers versus their career prospects abroad. Because, as the communication becomes stronger and starts echoing back, the status of local scientists in the eyes of foreign companies, research institutions and universities will grow. If the relative value of Research in Estonia is less than their own value for another country or university, a brain-drain may ensue. The long-term challenge is to ensure that this never happens.



Avoid clichés, as shown above

Brand description

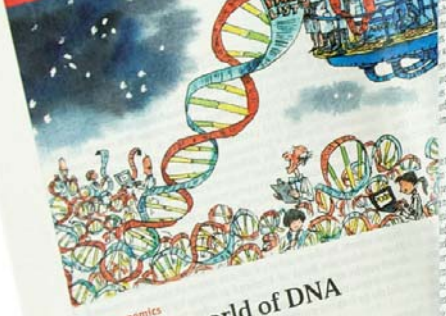
Most national science communication looks alike. Scientists staring at various important looking bottles and machines, wearing lab coats in either light blue or white.

Proving that “scientists do science” by showing people doing science is how communication is done, if the aim is to render the visuals pointless and the material as a whole unremarkable. This is a suitable strategy for Germany, as they have more than enough money to be noticed for being German. However, Estonia has no such luxury and therefore our limited communication material must be first noticeable, by being quite different while at the same time being very self-confident. Our strength will be in being so sure of our strengths, that we don’t have to cater to stereotypes to be believable (while not being noticed).

Research in Estonia uses as visual materials an elaborate caricature style, with illustrations custom made for this communication program. Unlike photography, which is generally the same and generic, this style of illustration is unique, very difficult to copy and incredibly detail-rich, which lends it longevity. Furthermore, because of the lack of real-life detail, it can be used for much longer than photos, which because of the continuous march of technology, age quickly.

The overall look and feel of Research in Estonia is based on the visual identity of Welcome to Estonia (wTE). However, the illustrations will be used, in accordance with the visual identity of wTE, instead of photography. Photos will be used only if they illustrate particular technology or cases.

Science and technology



Human genomics The new world of DNA

A long-term effort to catalogue all the bits of the human genome has released its results

WHEN John Keats read George Chapman's translation of Homer he felt, in his elevated, poetical way, like "some watcher of the skies/When a new planet swims into his ken". So many biologists feel when they get their hands on the first full release of analysis from a project called ENCODE—a release which includes some 30 research papers, six of them in the journal *Nature*, and a huge amount of well-curated data being made freely available online (see, there's even an app). This is biology on a scale that takes hundreds of people years of their lives, costing as much as all but the biggest telescopes used by today's watchers of the skies. And it reveals a new world.

The revelation's effect may be poetic in its grandeur. Its nature, though, is prosaic. It is a parts list: ENCODE stands for Encyclopedia of DNA Elements. The consortium that created it—442 members in 32 institutes around the world—has used increasingly impressive tools available for sequencing genomes to mount a systematic analysis of 37 different types of human cell, attempting to say just what each part of the genome is doing in them. Their results confirm on a grand scale what has become clear over the decade since the Human Genome Project first produced a sequence of the three billion "letters" of which the genome is made: there is a great deal more to genomes than their genes.

Junk schmunk

Now ENCODE has shown that fully three-quarters of the genome is transcribed into RNA at some stage in at least one of the body's different types of cell. Some transcripts are whittled down more or less immediately, but 62% of the genome can end up in the form of a transcript that looks stable. There is a sense in which these tran-

occupational segregation of employment in the Over time, their figures has come to resemble...
importance of "non-tradable goods and services" Californian dentists...
his own dentists...
Sandle Hatsh...
Business found...
and 2008 occupational health-care jobs...
less than 10% in...
mix present in...
account for...
Wohl point...
jobs are more...
What is more, if...
in different...
for other rea...
particular...
for these other...
force is also...
variation.

gather information...
California...
each easier to...
airlines...
travel costs...
without...
aspect of...
stock to...
falling mo...
ination, the...
are able to...
surface.

comes, ad...
help to...
net mi...
consist...
north...
and to...
backies...
ward...
scribed by...
pro...
Edward...
ment...
ment...
cost...
cent.

RNA tran...
being...
seemed as if only...
was actually...
that a lot of the rest was or might...
be "junk".

Science and technology



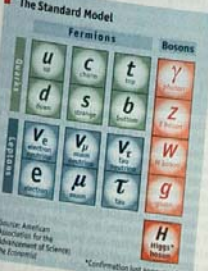
The Higgs boson
Gotcha!

The hunt for physics's most elusive quarry is over

WE HAVE a discovery! Rolf Heuer, the director-general of CERN, was in no doubt. He left none of the wiggle room with which physicists often hedge their announcements when he summed up the results of his organisation's search for the Higgs boson. These were presented in detail on July 4th by Jose Incandela and Fabiola Gianotti, the leaders of the two experiments that have been looking for the elusive particle. CMS, run by Dr Incandela, and ATLAS, run by Dr Gianotti, are fitted to the Large Hadron Collider (LHC), the principal piece of equipment at Europe's main particle-physics laboratory, near Geneva, which CERN runs. Both have found conclusive evidence for a particle of the right type and mass to be the Higgs. If it is not actually the Higgs, that will be the biggest upset in physics for a century.

It has taken five decades, billions of dollars and millions of man-hours. But at long last, Peter Higgs, a British physicist (pictured above), and four other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.



The Standard Model

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

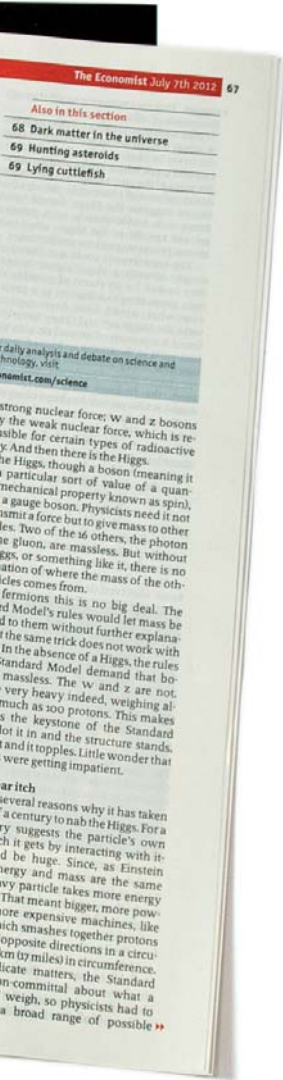
The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

The discovery puts the finishing flourish on the Standard Model, the best explanation of physics for a century.

There are nearly half a dozen other, less well-known individuals—François Englert, Gerard 't Hooft, Tom Kibble and Carl Hagen—can crack open a bottle of champagne. They are the ones who, in 1964, plucked what has come to be known (familiarly in some eyes) as the Higgs boson from formulae they were working on to fix a niggle in quantum theory. Another co-ordinator, Robert Brout, died last year.

Writing about serious research can be catchy and engaging - one can't bore people into reading.



Copywriting and making science intelligible

Conventional scientific publications are usually incomprehensible without specialist knowledge. These publications presume deep interest and therefore are rarely written in an engaging manner that would also appeal to accidental browsing.

To use Estonian scientific achievements as case stories, to be published online so as to facilitate accidental interest as well as quick reaction to relevant or not relevant information, the material must be engaging. In short: it must be well written, not presume deep interest and be illustrated. There is nothing as off-putting, as a full page of text without a single picture, graph or illustration.

Our benchmark for comprehensible science writing is *The Economist*. As this sample illustrates, a topic as non-interesting as bed bugs can be presented in an engaging manner:

Ms Dean and Dr Siva-Jothy were testing the idea that fine body hairs (known, technically, as vellus and terminal hairs) are there to alert their owner to creepy crawlies such as bed bugs, which might be intent on biting them, and that the hair may also get in the way of such arthropods' activities, giving the owner more time to react before he is bitten.

The standard "lab rat" for this sort of experiment is the university student, and Ms Dean and Dr Siva-Jothy managed to recruit 29 eager volunteers for their study—19 men and ten women. Each had a patch of skin on one arm shaved, marked with a pen and surrounded by petroleum jelly (to fence the bed bugs in), and a commensurate patch on the other marked and surrounded, but not shaved...

The not-so-naked ape. The Economist, Dec 17th, 2011

To make Estonian scientific achievement resonate internationally, we must simply follow Albert Einstein's maxim, "If you can't say it simply, you don't know it well enough".

