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Institute of Molecular Life Sciences

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## Selber die Hände binden?

### Die Basler Deklaration als Beispiel von der Normentstehung durch Selbstregulierung

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Präsident, Verein "Forschung für Leben"

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Rechtswissenschaftliche Fakultät, Universität Basel



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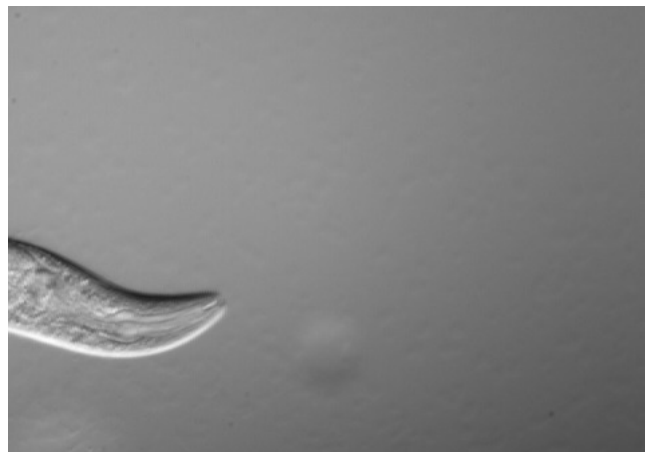
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## About me

Professor for molecular biology at the University of Zurich

Research focus: basic research on programmed cell death in *Caenorhabditis elegans* (model organism; biologically an animal, but not considered an animal by current legislation).





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Forschung für Leben

President of the association “Forschung für Leben”

Mission: Promote a dialogue between society and life scientists.



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## Scientific Process (basic research)

1. Generate knowledge
2. Share knowledge



## Who to communicate to?

- Peers (scientific community)
- Students (teaching)
- General Public (community at large)



## Why communicate?

- To peers
  - Increase the body of scientific knowledge
  - Career development
  - Increase standing in the community
  - Financial gain



## Why communicate?

- To peers
  - Increase the body of scientific knowledge
  - Career development
  - Increase standing in the community
  - Financial gain
- To the public
  - Reporting (legal, financial)
  - Increase understanding of science
  - Increase support for science



## The virtuous cycle

Scientific Research

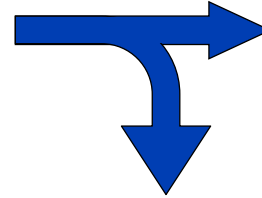


Progress  
Better society



## The virtuous cycle

Scientific Research



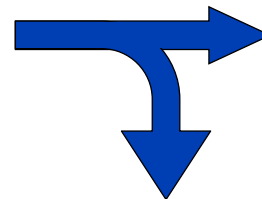
Progress  
Better society

Science education  
Science communication



## The virtuous cycle

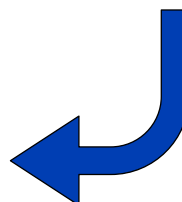
Scientific Research



Progress  
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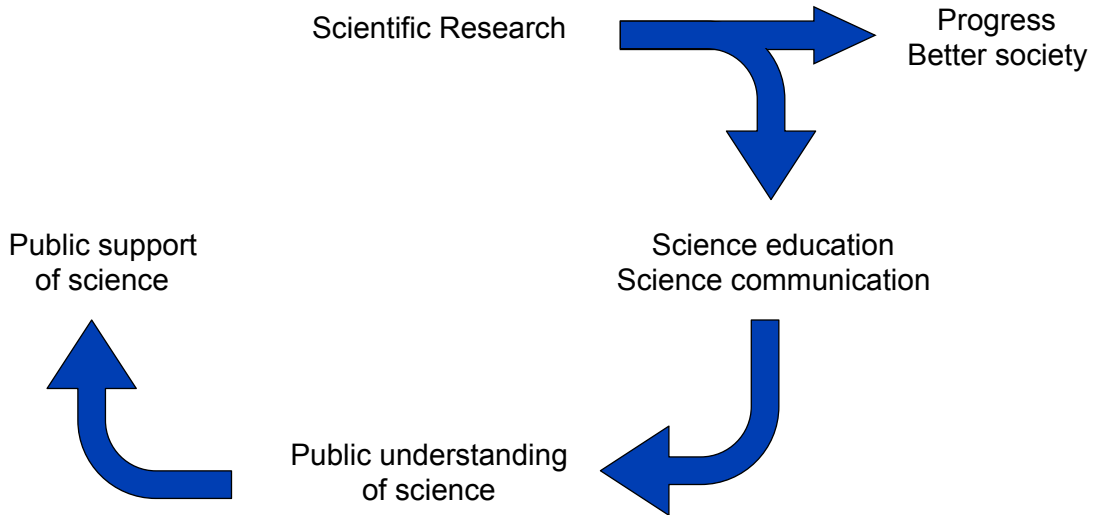
Science education  
Science communication

Public understanding  
of science

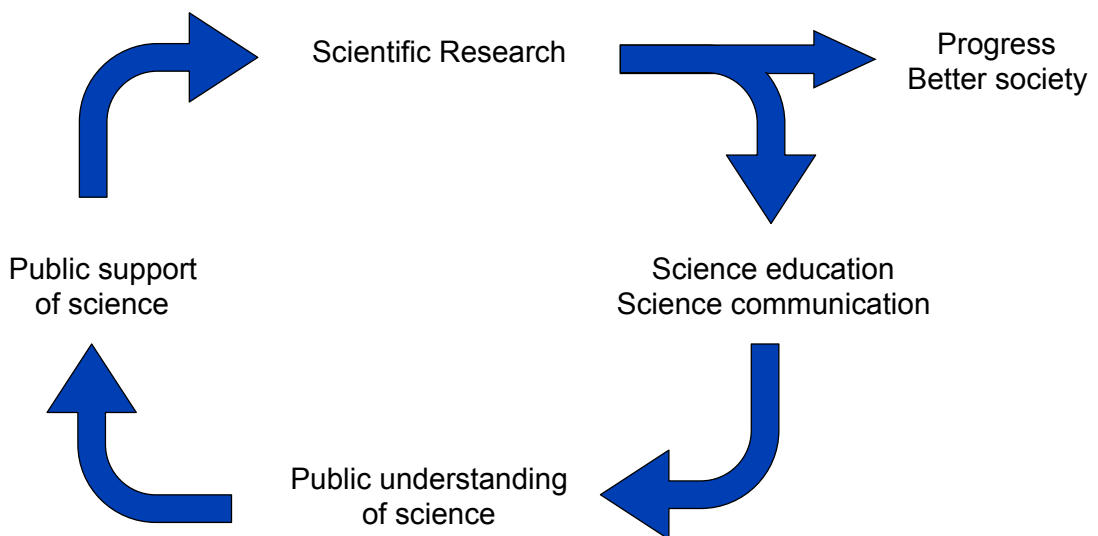




## The virtuous cycle



## The virtuous cycle





## Why should scientists communicate with the public?

- Enlightened “self-interest”
- Switzerland is a knowledge society. Its thriving depends on a culture of innovation and a well-educated workforce.
- Switzerland is a direct democracy. Even issues that are scientifically highly complex can be put to a general vote.



## How to go about communicating science?

- Neutral information provider (“educator”)
  - State the facts
  - Let them decide for themselves
- Supporter of the “scientific point of view” (“lobbyist”)
  - State the facts
  - Explain why your position (based on your analysis of the facts) is the right one to take



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## **Scientists cannot afford to remain “neutral” on science policy issues.**

Political decisions are taken not based on facts, but based on how these facts are interpreted. Interpretation is subject to argumentation.

In a pluralistic society, multiple points of view will exist.

If scientists do not actively express “their” opinion, they will leave the field to those with differing views.



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## **Example: experiments with animals**





## Recent outdoor poster advert campaign in Zurich



SCHWEIZER LIGA GEGEN VIVISEKTION und für die rechte des tieres

Postfach 148 | 1228 Thônex | Conf. Info: T +41 (0)22 369 73 37 | admin@svl.ch | www.svl.ch | CCF 12 2145 6

“Modern research avoids animal experiments”  
- Swiss league against vivisection



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“There are better research methods than animal experiments”  
- Swiss league against vivisection



## Even some moderate animal rights groups argue that experiments with animals:

- Are unnecessary and outdated
- Provide no significant medical progress
- Are a waste of animal lives
- Are cruel
- Are by done by researchers who do not care about or respect the law

TIERVERSUCHE

### Das sinnlose Leiden im Labor

Sind Tierversuche in der Forschung so unverzichtbar, wie uns das jahrelang eingerichtert wurde? Immer mehr Studien ziehen das stark in Zweifel – doch die Zahl der benutzten Tiere steigt und steigt.

TEXT: THOMAS GRETHER

Die Zahl der Tierversuche nimmt in der Schweiz seit drei Jahren stetig zu. Im Jahr 2006 wurden laut Bundesamt für Veterinärwesen (BVET) in Labors von Universitäten und der chemischen Industrie insgesamt 716'000 Tiere für Verpflegung- und Medikamententests verwendet. Darunter 2340 Schafe und Ziegen, 2419 Hunde, 432'933 Mäuse, 61'182 Vögel, 480 Schweine und 441 Affen. Wie viele der Tiere ihr Leben lassen mussten, ist unbekannt. Die Versuche scheinen viele Schweizer nicht zu stören: 46 sind eher dagegen, wie eine im Januar veröffentlichte Studie der Stiftung Animalfree Research zeigt. «Die meisten wissen wohl nicht, dass viele Tierversuche unnötig sind», sagt Markus Deutsch, Arzt für Innere Medizin von den Ärztinnen und Ärzten für Tierschutz in der Medizin.

**«Schlechte Qualität der Versuche»**  
Tatsächlich sind in den letzten Jahren in Fachzeitschriften mehrere Studien erschienen, die laut Deutsch «das bisher auch von der Ärztschaft weitgehend akzeptierte Konzept des unverzichtbaren Tierversuchmasses in Frage stellen». Die letzte Studie erschien kürzlich im renommierten «British Medical Journal». Die Wissenschaftler untersuchen, ob die Resultate sechs unterschiedlicher Tierversuche mit den klinischen Effekten beim Menschen übereinstimmen. Darunter waren Tests für Wirkstoffe, die bei Hirn Schlag und Knochenbruch helfen sollen. Die Wissenschaftler kritisieren folgende Punkte:  
→ Die methodische Qualität der Tierversuche sei «schlecht».  
→ Es seien «starke Hinweise» vorhanden, dass in Testergebnissen das Ausbleiben erwarteter Effekte verschwiegen wurde.  
→ Die Bedeutung der Tierversuche sei insgesamt in Frage gestellt. Denn die Ergebnisse «widersprechen zu oft» den klinischen Resultaten.

Das drastische Urteil entdeckt selbst der mit sieben Medizinprofessoren besetzte Redaktion des offiziellen Fortbildungs-



Nur eine Maus (links) im Jahr 2006 wurden in der Schweiz 422'933 Mäuse verwendet.

organs der Ärztsvereinigung FMH ungewohnt kritische Töne. Im «Schweizerischen Medizin Forum» schrieben sie: «Der ahnungslose Bürger nimmt an, dass die Resultate aus Tierversuchen mit jenen aus klinischen Studien am Menschen mehr oder weniger übereinstimmen.» Doch die Studie liess an dieser Meinung zweifeln. «Die

Diskrepanzen zeigen, dass der Tierversuch nichts oder nur wenig mit der menschlichen Krankheit zu tun hat.»  
Bereits im Jahr 2004 hatten Wissenschaftler im «British Medical Journal» eine Untersuchung veröffentlicht, die der Frage nachging, ob es für den Nutzen von Tierversuchen Beweise gibt. Schon damals lie-

BEI DER ARZTSVEREINIGUNG FMH



## Possible reactions from scientists

- Denial
- Trivialization
- Hide in the ivory tower
- Frustration
- Confrontation
- Enter into a dialogue



## Origins of the Basel Declaration

- Discussions between Verein Forschung für Leben and the DFG (Deutsche Forschungsgemeinschaft) committee on animal research.
- Meeting “Research at Crossroads” held in Basel, Switzerland on 29-30 November 2010, with ~ 80 scientists and science policy experts
- Meeting attendees addressed the following questions:
  - How is the scientific community contributing to the dialogue within society regarding animal research?
  - How is the scientific community reacting to the skepticism expressed by many regarding the usefulness / need for animal research?
- The Basel Declaration: an Appeal to more trust, transparency and communication in the area of animal research.



## Content Basel Declaration

- Commitment to highest standards in experimental design and animal care (corresponding to current CH level regulations).
- Commitment to and support of the 3R principle.
- Commitment to a greater transparency regarding animal research.
- Commitment to actively promote dialogue about animal research with the public and with other stakeholders, including animal welfare organizations.
- Demand that “society” recognizes that animal experiments are essential for medical progress both now and in the foreseeable future.
- Demand that all stakeholders participate in a constructive dialogue.





## What the Basel declaration is meant to be, and what it isn't

- It is meant to be:
  - A commitment to high ethical standards – effort to reclaim the moral high ground.
  - An effort by scientists to constructively participate in a debate on the needs and the limits of animal experimentation in our society.
  - A call to the other stakeholders and to society to also participate constructively in this debate.
- It is not meant to be:
  - An effort to stave off future legislation in the area of animal experimentations.



## The Basel Declaration after its founding

Declaration can be signed online ([www.basel-declaration.org](http://www.basel-declaration.org)) in six languages: English, German, French, Chinese, Spanish, Italian

Basel Declaration Society

**BECOME A MEMBER OF THE  
«BASEL DECLARATION SOCIETY»**

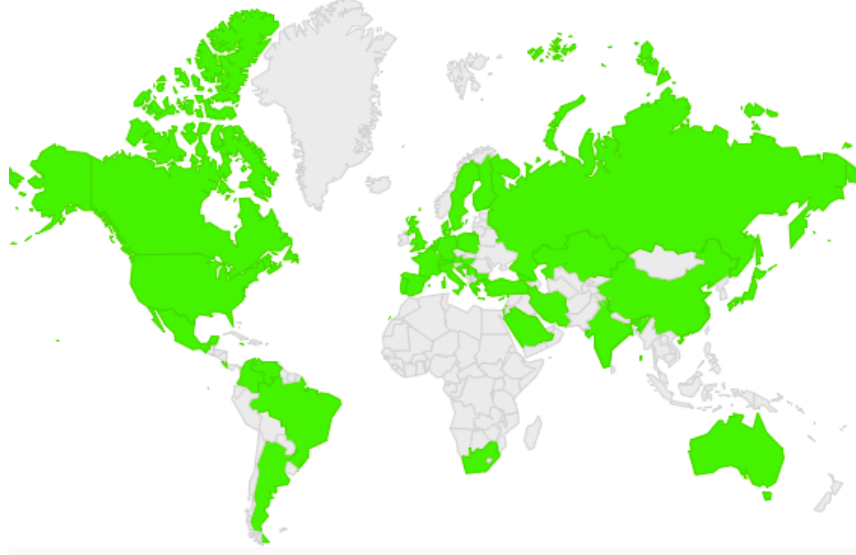
In the spirit of the Declaration of Helsinki, which has brought about major ethical progress in the field of clinical human research, the «Basel Declaration» reflects the self-commitment of its signatories to conduct research involving animal experimentation according to high ethical principles such as the «3R».

The Basel Declaration Society was founded on October 5th, 2011. Its members are research scientists specialising in the life sciences, and institutions active in research in



## The Basel Declaration: on its way to a global organization

Total > 1440 Individual signers from all over the World, and an increasing number of research institutions and organizations (total ~ 6'000 scientists).



## Effects of the Basel Declaration

### Academia

- Raised awareness of the issue of animal experiments within academia, particularly among academic leadership.

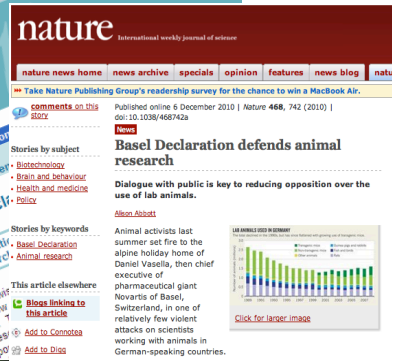


Sandwiched between the towering edifices of the Bundestag and the Chancellor's office, and just a short walk from other government buildings, the old family villa that is home to the Swiss embassy makes for a curious sight in the political heart of modern-day Berlin. Last week, the embassy hosted an international meeting of scientists from around the world who defend the use of animals in research. But despite being invited, nobody from the government offices bothered even to drop in. German animal-welfare groups also declined to attend. That was unfortunate given that the gathering was intended to discuss the principles of the Basel Declaration, which promotes outreach by animal researchers to politicians and the public. And something else failed to materialize — Germany's plans to create a professional office to promote and implement the Basel Declaration principles, which some attendees had hoped would be announced at the meeting by the country's research organizations.

This lack of action reflects poorly on Germany's proclaimed interest in creating an environment within which its generously funded biomedical research can flourish. And it is disconcerting, because, like all countries in the European Union (EU), Germany must translate into national law a complex and controversial directive that regulates the use of animals in research.

The Basel Declaration was drafted at a meeting of mostly Swiss and German scientists last November. It has now been signed by nearly 900 people, some 500 of whom came from other countries. The scientists want the declaration to have the same authority over the ethics of animal experimentation as the 1984 Declaration of Helsinki has over the ethics of human experimentation. The formal infrastructure being developed around the declaration could help to realize this ambition.

"Germany must translate into national law a complex and controversial directive."



# Effects of the Basel Declaration

## Academia

- Raised awareness of the issue of animal experiments within academia, particularly among academic leadership.
  - January 2013: CRUS publishes joint policy on animal research.
- Sensitized scientists to the need to more proactively communicate about their research.
- Raised interest in investing more into 3R research.

## Society

- Too early to tell. But your inviting me to give a talk is a good sign. ☺



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