

## The three Rs – ‘SLiM in beeld’

*On June 18<sup>th</sup>, a SLiM meeting was organised as a kick-off and preview for a series of workshops to be held later this year. The focus of this meeting was on the 3Rs (Replacement, Reduction and Refinement of laboratory animal use) in the context of Corporate Social Responsibility (CSR) and the role of communication. The subsequent workshops will go further into the topics of transparency and acceptance and use of 3Rs. These meetings are aimed to enhance transparency on the 3Rs and thereby create support to accelerated 3R acceptance within industry. The inspiring meeting was chaired by Simon Rozendaal, Editor Science at Elsevier. After a preliminary lecture about the SLiM project by Cyrille Krul and presentations of representatives from industries that already have ample experience with CSR in relation to 3Rs, lively discussions with the participants took place e.g. about opportunities to benchmarking companies.*

### **Animal Welfare and Corporate Social Responsibility**

Over the last decades, animal welfare principles have been firmly established in the Netherlands and the EU and are gaining importance globally. According to Dirk-Jan Verdonk (WSPA, member MVO platform) this trend is likely to continue, if not to accelerate. The growing attention to animal welfare is also beginning to be reflected in international CSR frameworks, such as ISO 26000<sup>i</sup>.

As a consequence, CSR reporting and transparency on animal welfare, including on the 3Rs, will be increasingly asked for. More and more companies, as depicted in the presentation, have realised how CSR on animal welfare could increase stakeholder value. One way to increase the incentive for implementations of 3Rs in CSR is by benchmarking, for example by the Business Benchmark on Farm Animal Welfare<sup>ii</sup>. Moreover, ISO26000 (factoring in ISO10993-2) is considered a good starting point for developing CSR on the 3Rs.

### **The role of the index on CSR and transparency**

In his presentation, Ed Monchen (COO Access to Medicine & Access to Nutrition) stated that his experience with the ‘Access to Medicine’ index<sup>iii</sup> demonstrated that an index can indeed change the attitude of companies towards societal issues. An independent index gets international exposure and a high ranking generates stakeholder (and shareholder) value, which is an important incentive for companies to invest in CSR .

Monchen listed four main criteria that have to be met for an index to become successful:

1. Index of a relevant societal issue (e.g. health, food, labour conditions, animal testing)
2. Business and academia can contribute in solving the problem. They have a role to play. Drivers and barriers influence (attitude) change
3. There is a positive, competitive dynamic. Best practices can be identified, as well as leaders for change
4. Transparency can provide an added value

In addition it is essential that an index is made by an independent organisation via a multi-stakeholder approach. A safe environment must be provided for discussions with all stakeholders, but also for databases and generated data. And the ambitions must be high. E.g. with regard to the 3Rs that could imply a focus on Replacement of all animal experimentation as an ultimate objective.

### **About SLiM**

The project SLiM ‘Sneller van Innovatie naar Mens’ aims to find ‘a faster way from innovation to humans’ by stimulating and accelerating the development of more predictive and both time and cost effective alternative methods. Together with researchers in knowledge institutes, industry, government and representatives of national and European regulatory authorities, four areas of research were identified as focal points for SLiM; carcinogenicity, allergenicity, reproductive and developmental toxicity, and barrier functions. Besides the development of methods that will Replace, Reduce and/or Refine animal experimentation (3Rs) the activities within SLiM also include the dissemination of good practices, education, and the promotion of regulatory implementation.

*Organisation by: Taskforce Innovatie Regio Utrecht (TFI), University of Applied sciences Utrecht (HU), TNO, Utrecht University, Danone, GSK, RIVM and NKCA.*



### Sharing science with stakeholders on a sensitive subject

In his lecture, Gavin Maxwell (SEAC, Unilever) depicted Unilever's experience in communicating research on 3R-alternatives to animal testing, both to the public and with the scientific community and other stakeholders. Even for a company as large as Unilever acceptance of new approaches (including 3R-alternatives) is not self-evident.

1. The first thing to do is to *generate scientific evidence* and discuss the results.
2. Secondly the result must be *communicated effectively*, published and shared with partners or partnerships. Communication is always science-based, discussing benefits versus risks but, especially for the public, clearly formulated. To share more detailed information within the scientific community, Unilever has set up a separate website: Safety Science in the 21<sup>st</sup> century<sup>iv</sup>.
3. Finally it is essential to *know your supporters, to join them and not to give up*. According to Maxwell, one of the most important remarks would be to address the challenges and drive creativity through multi-disciplinary working groups, including policy makers and regulators, and NGO's. And to look outside your own science domain, but also outside your own 'culture'. Change will require strategic thinking and long-term support and investment from senior stakeholders. On a scientific/technical level, thought leadership in fundamental and applied research is essential to achieve strategic change and engage in new partnerships and external collaborations. Staff will have to be taught new skills and approaches and attention must be paid to attracting and retaining those scientists that have a CSR mindset.

### 3Rs in CSR reports - Experiences within GSK and EFPIA

In the pharmaceutical industry it is more common to communicate about animal experimentation and 3Rs than in, for instance, the food industry. Gill Fleetwood (GlaxoSmithKline, Office of Animal Welfare, Ethics and Strategy) shared her experiences within GSK and EFPIA with the participants. With regard to animal experimentation and the 3Rs, the following aspects are communicated:

- Why animal research remains essential in progress.
- The progress made in terms of the 3Rs (animal numbers, change of species used, examples where 3R-alternatives have been implemented)
- The company culture (welfare standards, regulatory oversight, awards, management involvement, governance, future commitments, engagement with external 3R initiatives)
- Examples of the scientific progress made (working with regulatory authorities, method development, sharing best practices)

It is a challenge to get the message about animal experiments and the 3Rs across, because it involves complex science, which needs to be expressed in an understandable way. E.g. Representative pictures of animal research can only be used if there are sufficient possibilities to explain this in context (which is often not the case in terms of limited space to report). Furthermore, advances in terms of the 3Rs are often the outcome rather than what is driving the change. Big advances often take long to be accepted and implemented, while other advances may be small incremental steps, or either local or global.

In collaboration with EFPIA key performance indicators have been identified for the assessment of companies' investment in and the impact of 3R initiatives. The quantitative indicators are: the number of labs under specific accreditations; number of animals versus R&D budget over 5 years; the number, subject and impact of internal 3R awards; the fte's in and dedicated budget in 3Rs, and; the internal 3R organisation. Qualitative indicators include: reduction in severity of pain and distress; impact of the ethical review process; new technologies; internal communication; evidence of senior executive ownership of 3Rs, and external 3R activities.

Fleetwood stated that no transparency is not an option. Industry, especially the non-pharmaceutical industry, will risk a total ban of animal experiments as the public opinion may change if proactive in communication on animal experiments is lacking.



### Drivers and Barriers for acceptance and use of 3Rs

Regulatory acceptance and use of 3R-models is a complex process with a multitude of factors influencing the speed of progress. By defining the drivers and barriers this process is clarified and could in turn be enhanced. In her research, Marie-Jeanne Schifflers (University Utrecht) applied the 4C's of Commitment, Communication, Cooperation and Coordination, which are pivotal throughout the process from development to implementation to stimulate 3R acceptance by all involved stakeholder groups. Two important aspects are: transparency and CSR (Figure 1); and the interaction between scientists, companies and regulators to accelerate the acceptance of alternative test methods (Figure 2). These two aspects were presented as the main topics for the workshops that will be organized by SLiM in October and December.



Figure 1: Transparency - from intention to action



Figure 2: Acceptance of 3Rs - interaction with regulators

### Discussion

After the presentations, the audience was invited to share their ideas and wishes for the workshops to come.

- During these workshops, participants should be able to discuss the subject freely, in a safe environment.
- The first workshop, *'Transparency – from intention to action'* is aimed to help companies and institutions become more transparent about animal welfare and the 3Rs with limited risk of reputation damage. This workshop should be put in the context of the new European Legislation on protection of animals and the Dutch *'Wet op de Dierproeven'* (Wod), including its rules on the non-technical summary (NTS).
- Participants suggested to clearly state the intention of SLiM; namely the Replacement, Reduction and Refinement of animal experimentation. And to address the issue of benchmarking. The SLiM project team would like to work towards defining criteria for an index.
- Another request was to address the assumed distinction between communication about 'what people want to know' (public communication) and the information that is reported as part of CSR progress.
- The second workshop will be about *'Acceptance of 3Rs – interaction with regulators'*. The SLiM project team would like to stimulate the interaction between industry and legislation. Participants expressed the need to involve regulators, fundamental scientists and applied scientists.
- A third workshop that was proposed would focus on *'Implementation of new legislation (Wod)'*. However, in the months to come many different workshops will be organised on this subject for different target groups and this was judged as a responsibility of the ministry of Economic Affairs. Therefore the SLiM project team decided to cancel the last workshop.



### Summary and concluding remarks

In his summarizing remarks of this kick-off meeting, chairman Simon Rozendaal claimed he agrees with Marianne Thieme, the leader of the 'Partij van de Dieren', in the treatment of animals being a matter of civilisation. "In that sense we are more civilised than our forefathers. Never in the history of mankind were animals treated as respectfully as today. The number of animal tests in the Netherlands are less than 40 % of what they were in 1980!" Yet the discussions during the meeting made him somewhat change his opinion. "There is still a road ahead of us. We can go from 40 % of 1980 to 10 or 20 %, although zero will never be attainable in my view." Animal experimentation can be reduced in different ways. Within the SLiM project, efforts are made e.g. to bring a carcinogenicity test in rats down from two years to nine months. At Unilever a clever in-silico approach can reduce the number of in vivo-tests. And at GSK, genetically modified mice could replace small monkeys, while in turn, zebrafish could replace rodents.

During the meeting, it was shown that an international standard for CSR on animal welfare and the 3Rs can be developed by involvement of all stakeholders including society. Transparency about a companies' 3R efforts is not easy, but it has been shown that 3R investments as a part of CSR will increase stakeholder value. More importantly the risk for not investing in transparency could lead to a change in the attitude of the general public and finally a product sector runs the risk of getting confronted with a political decision to ban all animal experiments altogether without having full blown alternatives available as was illustrated in the cosmetics sector.

Since the influence of stakeholders is only expected to grow and become more international, companies will increasingly have to communicate their 3R efforts in their CSR report. However, as of yet, there is no standardized method available for measuring these efforts. A benchmark or index could be helpful. Still, there are pitfalls on the road. For instance, most people would consider replacing a rodent in an animal experiment by a zebrafish a big step forwards. But people from some animal rights organisations would reject the notion that there is a pyramidal structure in life. In their view there is not much difference between a rat and a zebrafish." So if an index would be made of companies, based on how they treat animals, how would the replacement of a rat by a zebrafish be rated? Or the replacement of one rat by seven zebrafish?

According to Rozendaal, another interesting remark made was that the communication on animal experimentation should always be 'science-based'. "That sounds very rational and true but based on my own experience in this field I know that emotional communication can often be more convincing than rational communication." Other issues of concern include the economic consequences of animal guidelines applying strictly for European countries. Will multinational companies move their labs to countries outside the EU? From all this, Rozendaal concluded that there still is a lot to do. And thus, the most important lesson of the meeting was quoted from Gavin Maxwell: 'never give up'.

### Workshops calendar

October 29, 2013	Transparency – from intention to action
December 17, 2013	Acceptance of 3Rs – interaction with regulators

For details on location and registration for the workshops, as well as any additional information on the SLiM project please visit:

<http://www.taskforceinnovatie.nl/life-sciences/initiatieven/slim---sneller-van-innovatie-naar-mens>

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<sup>i</sup> <http://www.mvonderland.nl/trends-ontwikkelingen/iso-26000>

<sup>ii</sup> <http://www.bbfaw.com/>

<sup>iii</sup> <http://www.accesstomedicineindex.org/>

<sup>iv</sup> [www.TT21c.org](http://www.TT21c.org)