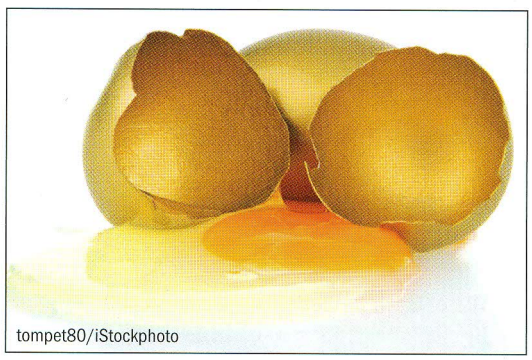
Science is about the Unknown...

... and, therefore, it's no wonder that projects, which apparently seem very odd from the start, once in a while take unexpected turns to finally yield fundamental insights or even important applications for society. There are countless examples – not only Alexander Fleming and his famous penicillin story or Alec Jeffrey's sudden notion that the so called minisatellites might be used for DNA fingerprinting.

Take, for example, a study analysing the urine of dogs that suddenly start drinking more than usual. Isn't such a project the ideal oil to pour onto the fire, rekindling the "mad scientist" cliché for the public? And wouldn't it again provoke comments like: "I wonder how much of the tax payer's money has gone into this research. These so called academics should be held accountable for this waste." Or "So, I assume that all serious topics of academic research have been satisfactorily concluded, then?" The irony, however, is that exactly that dogs' urine study ended up paving the way for understanding the effect of hormones on the human kidney, which, in turn, had enormous implications for diabetes patients.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Or, to stay with dogs and hormones, who knows that the discovery of the first hormone ever, secretin, emerged from a study that was originally aimed at understanding the digestive mechanisms in isolated short duodenum loops of dogs? Again, a prototype of the *unexpected* finding that finally turned out to be much "bigger" than what was originally *expected*.

And, along the same lines: didn't Fire and Mello's identification of the regulatory role of small inhibitory RNAs, while being funded for a project on the analysis of a certain developmental gene, follow exactly the same pattern?

The crux with today's science, however, is that the framework, under which such a "pattern of serendipitous discoveries" can fruitfully thrive, has been constantly eroded in recent years. Scientists throughout are complaining that politicians and funders have increasingly turned their focus to risk-free research with the highest probability of yielding *expected* results. This, as they say, has created a strong trend to reduce science to a business that only aims at picking the low-hanging fruits, which are already well in sight – and no longer at sailing out into lands of the unknown and unexpected instead.

A new science prize, aiming explicitly at fighting back this development, has now entered the stage: the Golden Goose Award – named after Aesop's fable of "The Goose that Laid the Golden Eggs". According to the website (*http://www.goldengooseaward.org*), the award was conceived by US-Congressman Jim Cooper with the purpose "to demonstrate the human and economic benefits of federally funded research by highlighting examples of seemingly obscure studies that have led to major breakthroughs and resulted in significant societal impact".

Nice words, good intentions – no doubt. However, with at least one of their three awards the organisers immediately got themselves into hot water. Japanese-born, Osamu Shimomura, together with Martin Chalfie and Roger Tsien from the US received the award for their studies, which finally established the Green Fluorescent Protein (GFP) from jellyfish as a fundamental experimental tool for researchers all over the world and thereby paved the way to a wealth of important insights into the cell biology of health and disease. Or, as the organisers put it, " [...] no one would have predicted that studying why a jellyfish glows green would one day lead to advances in genetics, cell biology, developmental biology, and neurobiology, to a better understanding of cancer, brain diseases such as Alzheimer's and other human diseases, and methods used widely by the pharmaceutical and biotechnology industries."

Four years ago, the trio won the Nobel Prize in Chemistry. And already at that time, the decision evoked sharp criticism because many felt that the real father of GFP, Douglas Prasher, had been omitted. Whereas Shimomura discovered the GFP in 1961, it was in fact Douglas Prasher, who in the 1980s began working with the GFP protein, after hypothesizing that the gene responsible for the protein's fluorescent properties could be used to help view formerly invisible molecular functions. In 1988, Prasher succeeded in isolating and copying the GFP gene. Four years later, however, his grant from the American Cancer Society ran out, forcing Prasher to abandon his GFP work and finally even to leave academic research completely. At that time, Prasher had already provided Martin Chalfie and Roger Tsien with the cloned GFP gene, who both successfully continued and rounded off the "GFP story".

Tsien and Chalfie have since both acknowledged and praised Prasher's role in discovering the GFP gene, on numerous occasions. They even invited him and his wife to attend the 2008 Nobel ceremony and paid for their trip.

Hence, Douglas Prasher, the man who once started out to clone an exotic gene from an even more exotic organism, actually provides one of the most excellent examples of a "seemingly obscure study" that has led to a major breakthrough. The Golden Goose Award, however, had it right under its nose but, unfortunately, missed this wonderful chance to impressively illustrate its otherwise honourable mission.