LETTER TO THE EDITOR: Genomics, the wild goose chase!

Genomics, the wild goose chase- It is a million dollar consuming development with no apparent benefit for the dairy sector as a whole. With this letter, I will try to put things into perspective, so that everybody can see the do’s and don’ts of the genomic world.

Prediction or dream wish
Looking at the results of the genomic bulls with daughters in production you can see a devastating truth; nearly all of the bulls drop and drop a lot. In other words, the predictions made were often not even close to the mark. The genomic numbers are polished up so hard, that when the daughters come into milk, they can never live up to the expectation; dream wish numbers.

Columbus disease
Everybody knows Columbus as the man who discovered America, however the Columbus which gave the name to this disease is Leadfield Columbus. In his time, he appeared as a syndicate bull with unbelievable high numbers. It was hard to believe it could be true. But as sellers said, even if he drops 20% he is still the highest. So many, many farmers used the bull heavily, because they all suffered from the Columbus disease. With the genomic bulls of today, we see the exact same thing happening all over again.

Equations
If you have two solutions and two unknowns, you can solve the puzzle. If you have 500,000 markers and 30,000 breeding values, you can remove the 0’s and you end up having 50 unknowns and 3 “solutions”. The genomic prediction is therefore no more than a wild guess. The reliability does not go up with the increase from 50 to 500 thousand markers. This is logic because the information with which they compare are not solid numbers, but fluid numbers, they also change.

Real change needed
A lot of people talk about change. We will avoid inbreeding because of genomics, we will change it. We are going to make 50 to 150% more progress with genomic breeding. It is going to be the biggest change since the start of breeding. All more words and yet nothing to prove it. O Man was with 196 out of the top 200 genomics heifers from May 2013 represented in the pedigree. Shottle and Planet appeared 178 and 148 times in the pedigree. Of all the heifers many of them had the above-mentioned bulls more than once in their pedigree. Bye, bye outcross!

For the last 7 months out of 1400 top genomic heifers, 97% of them had O Man in their genes and nearly 85% Shottle. The only change we need is do something different than the rest, to keep the Holstein cow alive.

Sire and son
The logic of the genomics is to find only those sons that outrank the father. It has no use to select a son who is less capable than his sire. However, since the genomics came into play the results are less than hopeful. O Man has 253 sons with daughters tested in the US and only 5 of them score higher than him on Net Merit. This is less than 2%. In the old days better percentage where reached with sire son comparisons without using genomics.

150% more progress, in what? for whom?
The top 10 NM bulls from August 2003 with daughters had an average of 702 NM. The top 10 NM genomic bulls without daughters had an average of 814. The genomic bulls without daughters had a 14% lead. In April 2013 the average of the bulls with daughter group dropped to 607 around 13.5%. However the genomic group fell to 515 NM which leads to a drop of 37%. Furthermore, the proven group, which was 106 NM behind now leads with 92 points NM. Where is the speed, and where is the progress? If there is any progress it must be profit for someone, however not for the average dairy farmer.

Cows are not pigs
The pig industry has major differences with our business. First, reproduction: A bull can reproduce more than 100,000 times the amount a cow can. In the pig industry, calves to become both a new producer and a new reproducer. In other words, the uterus of the cow is therefore very valuable. Cows are not pigs

Variation is essential
History tells us the story. The new major impact bull always has an original pedigree. With the genomic “speed-lane,” breeding original pedigrees are punished beyond belief. However, we will find new bulls not because of the genomic but despite the genomics.

Reliability or accuracy??
When I went to school everybody was talking about unbiased proofs, because if you used a certain bull with preference, the proof would look also of the mark, regardless the reliability. With the high predicted bulls being used as sire of sons in ET programs, it will make it a whole lot more difficult to see whether or not a bull is really good in the field. Instead of the predicted speed in breeding, we will lack on speed because of the failing directions. The accuracy of the breeding is way too low to take that kind of chance. Accuracy of the proof will become more important than the reliability of the proof. Genomics breaks the fall of the former number ones and will therefore keep the whole system running the wrong direction time after time. Reality kicks in, when the great grandsons are on sales with again staggering numbers??!

How to stop a runaway train?
Genomics did not find O Man, but said we did not know it all at that time. Genomics has chosen some very bad bulls as sires of sons. Again genomics said, “we did not make a mistake, now we know more”. This can continue on and on as long as farmers suffer from the Columbus disease. Nice talks, thin air, no substance or truth for that matter. Spend the money by improving the animal model, spend on better evaluations, less costly and more effectively. Genomics is like the saying on the wall in a pub: Tomorrow, beer for free!

Emperor’s clothes
Like in the fairy tale, the genomics people are sewing a wonderful picture and many want to believe. Maybe it will take more than one little man to tell how the real world really looks, because the sewing brings a lot of money to very few people and those people will keep on bragging about the wonders, which are bound to happen
tomorrow. Luckily, there are still some very good cows around, which can be used to get better bulls. Let’s hope that it starts freezing soon, so that the emperor will feel the cold of his new clothes.