

Proving how it works

Nigel Wild, head of Oxford-based consultancy Nigel Wild Associates, visits a company using conventional science to improve homeopathic treatments

Homeopathy is an alternative treatment discovered more than 200 years ago by Dr Samuel Hahnemann, a gifted and multilingual doctor and scientist born in Mannheim, Germany.

He began practicing as a doctor in 1781, and was appalled that the medicines and techniques available at the time would often cause greater damage to the patient through toxicity than the disease itself.

He actually withdrew from the profession for a time in order not to contribute to the harm being caused to humanity in the name of medicine.

Translating Scotsman William Cullen's *A Treatise on the Material Medica* led Hahnemann to experiment with the drug cinchona, a Peruvian bark extract effective against malaria.

Dosing himself produced mild symptoms of malaria, leading him to believe that the similarity of symptoms somehow produced the healing effect.

This postulated the first principle of homeopathy that like cures like, or *simillimum*. He coined the title homeopathy from the Greek: *homos* — the same, and *pathos* — suffering.

Alternative treatments major on plant and other natural extracts. Homeopathy uses these too, but can also transform substances such as aconite, which in their raw state are poisons, into effective remedies.

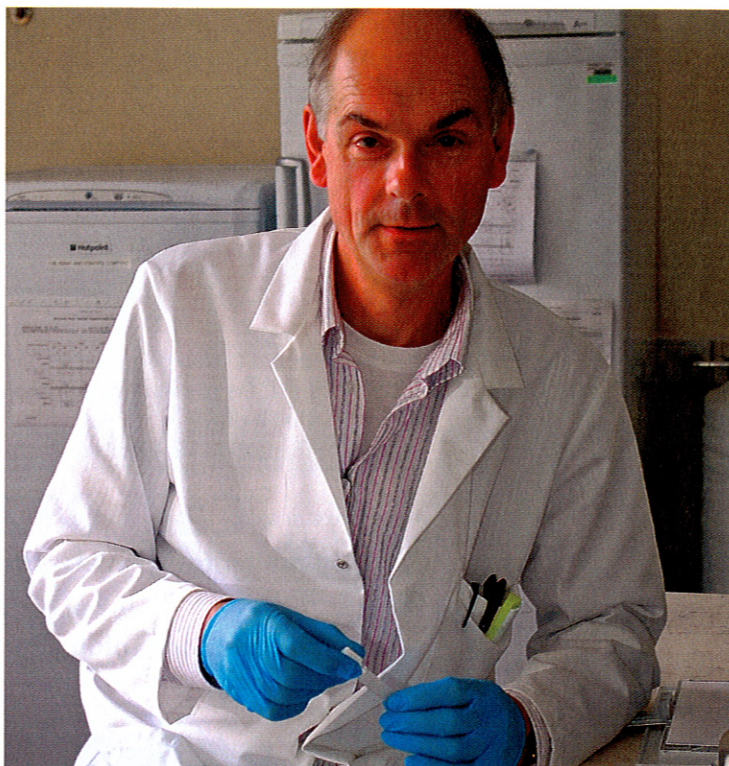
Dr Hahnemann's approach was a combination of dilution to remove toxins and shaking, known as *succussion*. Even when dilution and succussion were taken to the point where immeasurable or no amounts of the original substance were detectable, the solution still had an effect on both the healthy and the sick.

But even though today's NHS recognises homeopathy as a treatment, it has one controversial drawback: nobody knows why it works.

Dr Steven Cartwright (pictured), founder of Simillitech, based at the Cherwell Innovation Centre, Upper Heyford, is bringing science into homeopathy, and has devised a test to identify the properties of such treatments.

A biochemist, Dr Cartwright was originally an academic, researching antibiotics at Oxford University. Drawn to homeopathy by a chance conversation, he qualified as a homeopath, then left academia in 1988 to set up his own practice.

He said: "Worldwide, the homeopathic market is worth around £2bn a year but the



FACT FILE

Name: Simillitech
Established: 2009
Managing director: Dr Steven Cartwright
Number of staff: Two
Annual turnover: Confidential
Contact: 01869 238000

manufacturing processes are much the same as they have been since the 18th century.

"Not only are they inefficient, the pharmacist has no means of knowing the quality and potency of the remedies on sale. In fact some of them are totally inactive.

"Our simple test has enormous commercial potential, by introducing quality control to a growing market. We can demonstrate the difference between homeopathic solutions and ordinary water."

The dilutions and succussions can vary between a few and many hundreds, but after the 12th such process, no detectable molecules remain. To all intents and purposes, the solution is plain water.

"In my view, it's the shaking that is crucial to producing the changes in the molecular structure," Dr Cartwright explained.

"My test uses a control solution to compare against a homeopathic liquid."

Even at very low dilutions and thousands of

succussions, the solutions have some potency, but the effects change with each such step.

Homeopathic treatments are usually given at set points in dilution and shaking, and generally using blank tablets to which a few drops of solution have been added.

Simillitech's founder has been thinking about a definitive test for the past 20 years, but has only recently come up with the answer.

He follows the standard path of various dilutions and succussions, but has had to adapt a laboratory shaker to take the vials.

The shaker may look a little Heath Robinson, but has done the job efficiently ever since the company was founded at the beginning of 2009.

Then the solutions are analysed in a spectrophotometer, which measures different spectra from UV light passing through the liquids.

Dr Cartwright's business partner for the last ten years has been Kathy Stranks, who handles all the commercial aspects. Qualified as a

psychologist, Ms Stranks is also a homeopath and described how the treatment works.

She said: "It's about getting rid of toxins in the body, often through excretion. One good example is boils.

"Homeopathy will ripen and discharge a boil quickly, pushing it out of the body. Or, if a patient reacts to something like ibuprofen, using a diluted homeopathic version of the drug will counteract those side effects."

Funding so far has been personal, mixed with some from the homeopathic community.

The time is fast approaching when serious business angel or venture capital will be needed, not only to maintain the international patents in progress, but also to buy the costly equipment needed for the next stages of research.

The business plan looks to Simillitech becoming a manufacturing centre for the industry, modernising and streamlining the processes and introducing quality control for the first time.

Licensing out to pharmaceutical companies is also on the agenda, while knowing that regulation will be demanded in a presently unregulated industry.

"We will eventually be able to explain how homeopathy works," Dr Cartwright said.

"That will have a huge impact on the acceptance of homeopathy within the medical world, and generate increased business opportunities.

"We aim to be at the centre of those opportunities."