The Spiez laboratory: a quiet success story

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Vitus walking in the Jura continued from page 9



Nerve-wracking stunts at the very edge of the 160m drop

To our amazement a young woman performed single and double handed handstands on the very edge of the cliff while pictures were being taken of her. This was the most interesting day of the whole trip.

Then the two brothers became lost. All of a sudden we ended up on a track that no-one had used for a long time. We kept on going until we came to a tank barrier from the 2nd World War. There was no mention of a tank stop in the guide book and when a car came along, asked the driver how to get to Ste-Croix. With a wry smile he pointed up the mountain. So we climbed up for an hour and tried to get more information from a mountain restaurant but had a language problem in this French speaking area. Someone with a mobile phone and a bit of tech know how would have been handy.

The decision was made to carry on in the direction we thought we had to go and walked for hours through fields and forests and finally came to a sign which said "Ste-Croix" – what a relief. But it was still 3 hours walking away so stayed at a B & B at Les Cluds – that was a long day of 9 hours of solid walking.

It was great to be on the right route again; the area is well-known for is cross-country skiing. As usual the track led up and down, at times quite steep. The area is very close to the French border so it is quite isolated with just the odd alpine hut with a restaurant. There were many reminders of the two world wars with tank stops and bunkers on the hillsides.

From Le Suchet there were views over Lake Geneva and the outline of Mont Blanc was just visible in the haze.

From here on it was all downhill through the countryside and it was another long

day due to yesterday's stuff up. We spent the last night of our trek at the picturesque town of Vallorbe. It is also the centre of exclusive watch-making and we were told that some of the most expensive watches were made in surrounding farmhouses.



Our final day was in brilliant weather, tackling the last but very steep hill to look down on the picturesque Lac de Joux and the town of Le Pont, our final destination. And so we came to the end of our 10 day walk of approximately 230km.



Vitus & Richard at Le Pont at the end of their walk.

Impressions: I was amazed at the size of the area and the beauty of the Jura. There were many large farms with well-maintained buildings; most notable were lots of nurse cows with their calves of every breed. The high rocky cliffs and forested hills were impressive, especially the curved rock walls of the massive Creux du Van.

Dear Reader

If you have undertaken some great and interesting walks in Switzerland then please send your report and photos to our editor. We would love to hear from you.

The Spiez laboratory

4 March 2018 - A man and woman are found unconscious in Salisbury, England. After a while it becomes clear who they are: Sergei Viktorovich Skripal and his daughter Yulia. Why is this significant? Because Skripal was a colonel in the Soviet and then Russian military intelligence, the GRU, who defected and became an informant for the British secret service MI6. Soon enough, it transpires that both father and daughter are the victims of an attempted poisoning. The world's press gets its hands on a story worthy of James Bond. And the Spiez lab gets a job... But what is this laboratory exactly?

What led the Swiss government to create this institute in the first place – an institute that doesn't just analyse substances any more, and no longer works exclusively for Switzerland but on behalf of the entire world?

Lessons from the First World War – how the Spiez lab was born

After poison gas had been used to devastating effect in the First World War (1914-18), the Swiss government felt obliged to act. In 1923 it approved a new section for gas protection at the Federal Institute of Technology Zurich (ETH), which was relocated in 1925 to the Eidgenössische Pulverfabrik (now known as Nitrochemie) in Wimmis in the canton of Bern. This laid the foundation for the Spiez laborary - Switzerland's institute specialising in protection from atomic, biological and chemical hazards and threats. The lab's initial focus was on developing gas masks. It also experimented with masks for cavalry horses after 1928. Military carrier pigeons were also to be protected, and the lab developed a model of a ventilated vehicle for carrier pigeons.



The Second World War

With the horrors of the First World War just behind them and those of the Second World War looming ahead, the Swiss government decided in 1937 at the request of the General Staff to make provisions for chemical warfare in the

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army. The chemicals industry, which is mainly located in Basel even to this day, produced a tonne of mustard gas in September 1939 at the request of the military department. On 29 September 1939, the government approved the production of 300 tonnes of the gas. A chemical warfare factory was also founded although it was never put into operation. After the Second World War, poison gas stockpiles were gradually dismantled from 1947 on. The last three tonnes were destroyed in the Spiez laboratory's chemical safety lab in the mid-1980s.

The postwar period

When atomic bombs were dropped on Hiroshima and Nagasaki in 1945, Switzerland was confronted by a weapon with an unprecedented capacity for destruction. To pool available resources, the Swiss authorities transferred testing for protective materials and devices to the Spiez laboratory, which was now in charge of dealing with this new threat. This additional field of activity culminated in the new name AC laboratory. The NBC (nuclear, biological, chemical) protection section at the Spiez lab continues to undertake quality inspections for shelters and protected premises, and the physics section works on issues dealing with the production, application, processing and destruction of nuclear weapons. Since the nuclear disasters in Chernobyl and Fukushima, civilian hazards related to nuclear technology have also been instrumental in shaping the laboratory's work.



Global orientation after the fall of the Berlin Wall

After the fall of the Berlin Wall in 1989 and the end of the Cold War, the Spiez laboratory underwent intense discussions about reorientation. Already in 1984, the UN secretary-general tasked a laboratory delegation to verify whether chemical weapons had been used in the war between Iraq and Iran (1980–88). Samples were tested in Spiez and, in the interests of obtaining a second independent opinion, in a laboratory in Sweden. Both found overwhelming evidence of mustard gas and tabun, a nerve agent.

Other activities followed from this first mission in Iraq including the UN special commission to monitor the ceasefire agreement in Iraq, which was created in 1991 after the Second Gulf War. UN Secretary-General Kofi Annan (1938-2018) praised the work of the Spiez laboratory, paying tribute to the institution during a personal visit in 1997. Inlinewithitsnewstrategicorientation and Switzerland's diplomatic good offices, the Spiez laboratory began to provide expertise on a regular basis for Swiss delegations involved in disarmament talks. Over the decades, the Spiez laboratory has grown into a globally recognised centre of excellence and a veritable instrument of Switzerland's security policy. It should come as no surprise that the lab is among the 20 or so specialist laboratories worldwide that have been certified by the Organisation for the Prohibition of Chemical Weapons (OPCW) since its establishment in 1997. Within this select group, the Spiez laboratory is among the very few to have fulfilled the OPCW's demanding requirements every year exception - which is why it continues to serve as the OPCW's laboratory to this day. Against this backdrop and in view of the fact that since 1953 Swiss soldiers have been monitoring the ceasefire agreement between North and South Korea along the demarcation line in Panmunjom in what is the Swiss army's longest mission abroad, you can also see why, after US President Donald Trump's meeting with North Korean ruler Kim Jong Un in Singapore on 12 June 2018, the Spiez laboratory was already being touted by the media as part of the monitoring commission for a potential disarmament in North Korea.



Federal councillor Adolf Ogi with Secretary-General of the United Nations, Kofi Annan

Based as it is in a neutral country, the Spiez lab has become a key partner for the UN, the United Nations Environment Programme (UNEP), the International Atomic Energy Agency (IAEA), the World Health Organization (WHO) and the International Committee of the Red Cross (ICRC). The importance of the lab's work can also be gauged by the fact that it is the trusted laboratory of three Nobel Prize winning organisations:

- 1963: International Committee of the Red Cross (ICRC)
- 2005: International Atomic Energy Agency (IAEA)
- 2013: Organisation for the Prohibition of Chemical Weapons (OPCW)

And the Skripal case? The world's press, politicians, high-ranking officials and some self-appointed experts have been outdoing each other over the past few months with their conjectures, opinions and suspicions regarding the case, accusing one another of lying. Only the Spiez laboratory in the Bernese Oberland, tasked by the OPCW with analysing the poisonous substance, went about its work quietly, delivered its results and refrained from making any public statements.

https://houseofswitzerland.org/swissstories/science-education

