# The four exemplary lives of Professor Michel Fernex, devoted to Nature, medical science and humanity.



Michel Fernex, été 2021 à Biederthal, photo Rudolf Suter

Michel Fernex was born on April 2, 1929 in Geneva and passed away peacefully on October 2, 2021 at his home in Biederthal, surrounded by his family. It is with great emotion and deep sorrow that we received the news and we express our empathy towards his wonderful family. Michel Fernex gave everything he could give, to his family, to medical science, to the protection of nature and to the fight against military and civil applications of atomic energy.

He went to the end of his strength, overcoming with admirable courage the ordeals that life placed on his path during these last fifteen years. Those who knew him, who were received in his big and beautiful house in Biederthal, who worked and militated at his side, do not feel so much a loss as an absence. He lives in their minds, in our minds; he serves as a compass and even as a guide, but, strangely enough, he is no longer there even though we feel him close by, fraternal, attentive, reserved, firm, benevolent, available...

Michel Fernex harmoniously complemented all these human qualities with a flaw, that of a perhaps too great modesty. We never saw him put himself forward. Joy could be read simply on his relaxed features, illuminated by a bright look and a slight smile; a frown and an imperious word were the sign of great anger; his solicitude was expressed by the unselfish and unadorned gift of his knowledge and advice. He was not one of those characters who seek the limelight, blow air and make grand speeches to impress their fellow men.

Four lives at once.

#### Childhood and adolescence.

He is the second of four boys. His father was an orthodontist and professor at the Faculty of Dentistry in Geneva. His grandparents were Genevan notables, on the one hand the first judge for children of the City of Geneva, and on the other a very gifted businessman and art lover, who frequented the greatest painters of his time living in Geneva. It is important to note this taste for art in the family. Indeed, Michel and his brothers drew and painted a lot in their childhood and adolescence. Very early on, little Michel showed a love of Nature and an incredible sense of observation of the life that teems in it, witness the painting of a blue tit, which he did in 1935, at the age of 6... What a look!



Nature, and especially birds, are his favourite subjects. At a very young age, he met two great naturalists from Geneva, Robert Hainard and Paul Géroudet. They were to become his masters in nature observation and ornithology, friends with whom he remained linked until their deaths. As long as his hearing remained intact, Michel was able to recognise nearly two hundred species of birds by their song or call, the baggage of a seasoned ornithologist. Thus, quite naturally, Michel became a knowledgeable naturalist, an insatiable observer of the plants, trees, insects and animals of all the countries in Europe, Asia, America and Africa where he worked.

Nature, the domain of his first life, indispensable to his blossoming and resourcing; Nature of which he noted with acuity all the alterations due to the harmful action of men, in particular those caused by

the radioactive fallout of Chernobyl.

He therefore grew up in Geneva, in a ... good...Protestant family, faithful to the traditions of the Canton and of his country, Switzerland. During the war, Michel was sent to Zuoz, Switzerland, in the Grisons, to learn German. It was in the high school of this town that he became friends with Brice de Turckheim, also a nature lover; Brice whom he would call until the end of his life "his best friend". Brice made Michel promise to come and visit him in Trutt, in Alsace, as soon as the war was over. Promise kept. This is how Michel met Solange, Brice's sister, whose charm had an immediate effect on him. She too was not indifferent to this young man so gifted in nature, who spent almost every night of his stay with his brother observing the animals in the forest. However, they had to wait almost 10 years before Michel proposed to her.

## Higher education and a medical career; a fulfilled family life too.

Michel returned to Geneva after this holiday. After college, he started university studies, choosing in his first year to take courses not only in medicine, but also in biology, as both fields interested him. This says a lot about his extraordinary working abilities. He ended up specialising in tropical medicine, his profession. He then took a year to hitchhike across Africa to Tanzania, to the coast of the Indian Ocean. His brother Claude, also a doctor, offered him the opportunity to work for a few months at the hospital in Sibiti in the Republic of Congo, which he managed. On his return, he studied anatomopathology for two years at the University of Geneva and followed this up with a thesis on mitral and aortic valve pathologies. He then spent three years at the University Polyclinic in Basel as an assistant, while teaching at the Institute of Tropical Medicine in the city. Finally, he completed his training as an infectious disease specialist for a year in Paris.

At the age of 28, Michel finally proposed to Solange. They got married on 13 July 1957. In September, they left in a Citroën 2CV for Senegal to work for two years at the Dakar hospital, followed by an internship in Mali at the Marchoux Institute to study leprosy and tripanosomiasis (sleeping sickness). Solange assisted him in his work. They had four children, Etienne, Antoine, Jean and Marie, born respectively in Barr (Alsace), Senegal, Basel and Tanzania.

Back in France, they settled in the ruin of Biederthal, which was being restored with the means at hand (25 years to complete) and which Solange had fallen in love with.

Michel worked in three institutions:

- Professor of Tropical Medicine at the Basel Tropical Institute;

- Member of the *Steering Committee on Tropical Diseases at WHO* for 15 years; this work led him to set up research units in many tropical countries in Latin America, India, South-East Asia and Africa, mainly for multi-drug resistant malaria, and to develop drugs to treat river blindness and onchocerciasis

- Director of Research and Development at Hoffmann-La Roche, where he worked for 35 years.

Very intuitive and far-sighted, he developed drugs with carefully selected collaborators:

- a malaria drug, FANSIDAR;

- but also two antibiotics that are still used today - BACTRIM, which has the great advantage of being effective even if you only take one or two tablets. Indeed, for countries in the South, especially Africa, he understood that the simpler the dosage, the better it would be followed because patients often had to travel many kilometres to get to hospital, or had to wait for the spaced visits of mobile medical teams (this drug, which also has the advantage of not creating resistance, still treats thousands of people) ; and ROCEPHINE, the most striking, a powerful antibiotic, close to penicillin, used among other things to treat meningitis, pneumonia, Lyme disease and various infections, which is still on the WHO's list of essential medicines... almost 45 years after its invention, to the great benefit of the Hoffmann-La Roche company.

Despite these remarkable successes, Michel remained true to himself, modest and discreet. Among us who benefited from his participation in our anti-nuclear and humanitarian actions, very few knew, even if only in bits and pieces, of all that this second life brought to medical science and to the relief of his fellow men.

#### Solange and the family.

Solange and he always supported each other in their activities. Solange was his medical assistant in Africa. She would proofread the texts of his association's communiqués. Michel brought his scientific side to Solange's numerous commitments, both associative and political, up to the European Parliament where she sat from 1989 to 1991.

Solange's death in 2006 plunged him into deep mourning from which he would not emerge until ten years later, thanks to his commitment to associations and his family.

In 2017, while crossing the road on the pedestrian crossing between the shop and the house, he was hit by a motorbike which injured his shoulder. He then needed home help, first from one of his granddaughters, then from professionals. A second accident made him even more tired, but that was not what stopped him from going to Nepal, at the age of 88, for his granddaughter's wedding!

Michel was faithful to friendships, but also to traditions. He never missed a family Christmas in the mountains. He did not miss any celebration of the 1st of August, the Swiss National Day, which brings his family together in Messery, a house on the shores of Lake Geneva that his parents, brothers and he bought in 1950. He was a father, a grandfather and a great-grandfather, present and attentive. In their cradle in Biederthal he taught his children how to observe and identify animals. Recognised as a doctor for animals as well as for people, he treated sick or wounded animals brought to him by the villagers: foxes, wild boars, ferrets, thousands of swallows numbed by the cold that he flew to Egypt..., and a crow that stayed with the family for several years.

Solange and Michel also taught their children to be welcoming and to respect other cultures and religions. They welcomed two children in difficulty from Paris for a year. There was always an extra place at the table, and people knew it. The local gypsy also knew that every year Michel would buy him a wreath and at least one basket for the end of the year.

A family life inextricably linked with his third and fourth lives.

#### The fervent protector of Nature.

As soon as he settled in Biederthal, Michel Fernex joined the LPO (Ligue pour la Protection des Oiseaux). In 1965-66, he was at the origin of the creation of the ornithological station of Kembs, on the Rhine Island. A few years later, studying mosquitoes as part of his work on malaria, he discovered the ce site that was not yet called the Petite Camargue Alsacienne (PCA). The site was under threat from lorries of rubble and waste being dumped in the backwaters and wetlands. To convince local elected officials of the interest of ce mosquito hole, he organises morning outings to make them aware of the la richness and la beauty of the place. With the association of the Friends of the PCA, founded in 1975, he will obtain in 1982 la creation of the first Nature Reserve of Alsace. To defend this nature that he loves so much, Michel gets involved in the AFRPN, today Alsace Nature, of which he is part of the CA between 1970 and 2000. He supported Solange, who was going to occupy the land where work was to begin on a lead factory that would have required the clearing of the Marckholseim forest, one of the last remaining Rhine forests. The occupation by local residents lasted several months until the project was abandoned. Solange spent several days and nights a week. The occupation continued on the other side of the Rhine in Wyhl against the construction of a nuclear power plant on the German side and then in Kayseraugst in Switzerland. In 1977, he supports Solange, their son Antoine and 5 other people during their 17-day fast to ask for basic guarantees before the start of the Fessenheim nuclear power plant. In 1983, in Paris, Michel accompanied Solange on a 40-day fast against the deployment in Europe of Russian and American medium-range nuclear missiles (SS20 and Pershing). He also participated in the creation of the Conservatoire des Sites Alsaciens (CSA), whose aim is to rent or acquire sites in order to better protect them through a respectful management of the particular animal or plant species that live there.

In his desire to share his naturalist knowledge, with the support of the *Société Industrielle de Mulhouse* he relaunched the *COSCINAT* (*Comite des Sciences de la Nature*) which he chaired for 30 years. Ce group of enthusiasts organises conferences, exhibitions and outings. Among the distinguished guests, Edward Goldsmith, the founder of *Friends of the Earth* (Great Britain) came in

1972 to present his book "*Change or disappear*". He took part in the publication of numerous bulletins (17 volumes), which were very well documented on nature in Alsace and which have become references. He set up the first ornithological data bank in the region and carried out censuses of migratory and wintering birds on the Rhine.

For more than three decades, Michel has been with Solange an agitator or rather an activator of nature protection in Alsace. Ahead of his time, he was not always well understood or accepted. In front of certain institutions or local elected officials, his Swiss origins were a handicap that he has transformed into an advantage by managing to mobilise cross-border funds... Through his obstinacy, he has succeeded in passing innovative ideas such as the vaccination of foxes against rabies rather than their systematic destruction. He has contributed to the reintroduction of the eagle-owl in the Alsatian Jura and was responsible for the return of the Lynx to the Vosges.

He has been for many activists a model and a guide. To learn to love nature "*that man has not made*" he thought it was necessary to attend in real life, and not only on a screen, the spectacle of the stag's bellowing or the play of the fox cubs in front of their den. In 1971 he wrote: "*For one measure to save nature, a hundred more are needed to destroy it*" and hoped that the ratio would be one to one.

Where did he find the energy to carry out all these activities? Certainly in the assiduous frequentation of nature. As a keen ornithologist, he always had his binoculars and his sketch and notebook at hand. He spent many nights under the stars, made countless stalks to the badger hole where he would gladly take children and adults. He particularly liked those snowy mornings to read on a blank page the traces of the night life that he interpreted with finesse. Until the last few years he has travelled to many countries to observe wildlife: to Greece in 2015 around the lakes of Prespa where pelicans nest, to Spain in 2016 to see the bears in Asturias, and even to Nepal. Until a very short time ago, he was still paying an almost daily visit to the chamois at the Saalhof.

### The opponent of atomic energy and the fighter for the truth about its damage.

Until the Chernobyl accident on 26 April 1986, Michel remained in the background of Solange's actions, who had been very involved in anti-nuclear struggles since the 1970s. He assisted her, supported her and took his part. Especially concerned about the risk of atomic war (it was the time when Ronald Reagan was raising the tension), he joined the Swiss section of the *IPPNW* (*International Physician for the Prevention of Nuclear War*) association in 1985, which had just been awarded the Nobel Peace Prize!

The explosion of reactor 4 at Chernobyl and the enormity and extent of the radioactive fallout from the disaster - the equivalent of what would have been left by an atomic battle on the borders of Russia, Ukraine and Belarus - motivated him to commit himself definitively and unreservedly to the fight against civil nuclear power and to try to convince *IPPNW* Switzerland to do the same, which was not *a priori* certain. As a doctor, he then entered the arena where, for more than thirty-five years, the advocates of the truth about the multiple and complex health consequences of radioactive fallout – a veritable historical disaster – have been confronting each other, and on the other hand the spokespersons of international bodies committed to denying almost all of it.

Michel was, as they say in English, a *World Class Senior Scientist*. He is one of the few scientists of this level to have given unrestricted support to all the associations and individuals who sought his knowledge, his testimony or his help. In this way, he has given invaluable credit to the information from the field, to the statistical data collected on the evolution of the clinical picture and to the claims of the populations exposed to radioactivity. He acted as a bridge between Russian, Belarusian and Ukrainian scientists, doctors and associations and their counterparts in Germany, France, Switzerland, Great Britain etc. But unfortunately he did not succeed in breaking through the wall of contempt that the international "radiological protection" experts have for all those who, like Michel, being foreigners to their milieu – and therefore necessarily incompetent – dare to challenge their gospel words!

Among his many interventions, let us quote

- participation in the sessions of the *People's Tribunal on Chernobyl* (Vienna, 12-15 April 1996), whose minutes were published in half a dozen languages;

- organisation of two *IPPNW* Congresses, in Basel on 15 February 2003 on the state of health of the children of Chernobyl, and in Berne on 12 November 2005 on the tragic fate of the liquidators;

- He also attended numerous meetings devoted to associations, for example the one called *Les Enfants de Tchernobyl*, founded in 1993 to welcome dozens of Ukrainian children from heavily contaminated districts in Alsatian families for a few weeks each year. Another example, a quarter of a century later, in May 2012, a year after the Fukushima accident, at the age of 83, he took up his pilgrim's staff to bring all his knowledge and attention to the inhabitants who were victims of radioactivity and to the associations, doctors and scientists who came to their aid. It was also a symbolic trip that saw him visit Hiroshima, Kyoto, Tokyo and Fukushima, a trip organised by Dr Eisuko Matsui and the writer-journalist Kolin Kobayashi. The contact led to the creation of a working group including Dr Matsui, doctors from IPPNW Switzerland, including Michel Fernex, and an international lawyer, Prof Michel Prieur. The initiative paved the way for participation in the *Symposium on Forensic Aspects of a Nuclear Disaster and Human Rights* (Waseda Uni., Tokyo, 14-15 October 2014), and the organisation of an independent symposium recognised *Nuclear Disaster and Human Rights*, in the margins of a UN Conference on Fukushima (Sendai, 14-18 March 2015);

- Filmmakers and authors preparing a film or a book on Chernobyl came to Biederthal looking for information, references, advice and testimonies, and he was happy to give them the satisfaction and share his experience in the struggle for truth.

His contributions to the struggles on the ground at Chernobyl were decisive, as can be seen in retrospect. In the 1990s, during his travels in the former USSR, he established links with key figures:

- Belarusian academician Vasily Nesterenko, a military nuclear physicist at the Sosny research centre near Minsk;

- Academician Alexey Yablokov, ecological adviser to President Boris Yeltsin

- Roza Goncharova, Head of laboratory antimutagenesis at the Institute of Genetic and Cytology of the National Academy of Sciences of Belarus ;

- Professor Youry Bandazhevsky, anatomopathologist, founder and first Rector of the *Gomel State Medical Institute* from 1990 to 1999, and his wife Galina Bandazhevskaya, cardiologist in a paediatric hospital in Minsk;

- and many others whose most outstanding work he helped to disseminate via the major Swiss medical journal, *Swiss Medical Weekly*, namely that of V. Nesterenko, G. Bandazhevskaya, Y. Dubrova, G. Lazjuk, A. Okeanov and their co-authors.

Vasily Nesterenko, the hero of Chernobyl, gave up his official duties after the accident to devote the rest of his life (until 28 April 2008) to the radiological protection of the inhabitants of Belarus. To this end, in October 1990, after having had hundreds of thousands of Geiger counters manufactured and distributed, he created the independent *BELRAD Institute*. In 1986, Roza Goncharova began to study radiation-induced genomic instabilities in the populations of the red voles living in and around the exclusion zone of the power plant. Youry Bandazhevsky directed scientific programmes related to the influence of incorporated radionuclides on a person's vital organs and systems, until he was sentenced to 8 years in prison for corruption (a classic...) by a military court on 18 June 2001.

At the turn of the millennium, the vulnerability of the case of the proponents of the truth about the aftermath of Chernobyl became apparent to Michel Fernex. He took the strategic initiative to have the most significant contributions translated and published, as mentioned above. Better still, with the collaboration and under the control of the Jülich nuclear research centre in Germany, he organised a double-blind experiment on the effectiveness of pectin in accelerating the elimination of incorporated radioactive caesium, a property contested by... the deniers of the health effects of the accident and those whose ears they had, and still have, within the *ad hoc* bodies of the *European Commission*. Without these initiatives for the recognition of essential scientific work, it is quite likely that the converging attacks from all sides against the *BELRAD Institute* would have succeeded and would then have completed the effect of the gradual drying up of public subsidies between 1995 and 2000. Similarly, it is reasonable to believe that the publications in the *SWM* of the Bandazhevsky couple's

work served the international campaign and the intervention of the French Ambassador Chmelevsky, to obtain the early release of Y. Bandazhevsky, shortly before the 20th anniversary of the accident.

In the meantime, on 1 April 2001, Michel and Solange Fernex and their son Etienne, Vassily Nesterenko and Wladimir Tchertkoff founded the association Enfants de Tchernobyl Belarus, a second strategic operation, with the aim of perpetuating the financing of the BELRAD Institute and the dissemination of information on the actual health situation in the contaminated regions.

The first years were difficult, even dramatic. ETB would have collapsed in 2006 - and BELRAD too after Solange's death, without the intervention of the association "Les Enfants de Tchernobyl", chaired by Thierry Meyer. ETB would not have been able to provide BELRAD with the financial support it needed to continue its recovery without the contributions of the Fondation France-Libertés, chaired at the time by one of Solange's great friends, Mrs Danielle Mitterrand, for the three years 2007 to 2009.

Michel Fernex chaired ETB from 2006 to 2010 and remained very active in the association until 2017, when he went to Limousin, in August, for La Fête qui a du sens, organised for ETB by his friend Pr Prieur, and to Paris, in November, for the World Social Forum on Nuclear Energy.

In retrospect, everything is a miracle, the product of circumstances, the courage of an unparalleled hero, Vassily Nesterenko, and solid links forged during the 1990s. What has been built and maintained is unique. There is nothing like it, not in Russia, not in Ukraine, not in post-Fukushima Japan. Unique and infinitely valuable. This is the heritage that Solange and Michel have entrusted to us. It is our destiny to make it bear fruit, following the example of Solange and Michel who submitted themselves to this assumed destiny, to the limit of their strength.

The challenge is immense, doubly immense: to maintain BELRAD, and to transmit objective information on the health consequences of the radioactive fallout from Chernobyl. For, well informed, one is a citizen; badly informed, one becomes a subject.

"How great it is, even greater dead than alive! Reading all the testimonies and sources gathered here, this is the exclamation that comes to mind. Greater dead because we did not know how great the man was when he was alive. This account of his life tells us so!

Rest in peace Michel, our great friend, we continue in the path that you and Solange have opened and traced.

- Yury Bandazhevsky, Coordinator of projects on health protection, Editor-in-chief of the collection « Chernobyl ecology and health » - Roza Goncharova, Pr Laboratory of Molecular Basis of Genomic Stability, Institute of Genetics & Cytology National Academy of

- Sciences of Belarus
- Kolin Kobayashi, écrivain et journaliste
- Patrick Lenoir, ex-Trésorier d'Enfants de Tchernobyl Belarus »
  Yves Lenoir, Président de « Enfants de Tchernobyl Belarus »
- Clément Libis, Association Nature Alsace Bossue
- Kazuko Matsuii, Director: HAHA. Inc./ Preserving Deciduous Teeth Network, JAPAN
- Thierry Meyer, Président de « Les Enfants de Tchernobyl »
- Marc Molitor, auteur de « Tchernobyl, déni passé, menaces futures », Racine, RTBF 2011
- Orie Muta, emeritus professor, Gifu University, JAPAN
- Alexey Nesterenko, Directeur de l'Institut BELRAD
- Andreas Nidecker, médecin, membre de IPPNW Suisse
- Bernadette Prieur
- Michel Prieur, Pr émérite de droit international, Université de Limoges
- Rudolf Suter, photographe et cinéaste
- Martin Walter, médecin, membre de IPPNW Suisse