

Nobel laureate at Lake Constance

Lindau and the chemistry of change

Nobel laureates are signposts: creative, courageous, forward-looking. But they are also forced to readjust their compass in times of crisis. On the 71st Nobel laureate conference in Lindau, 500 young researchers from all over the world watched them.

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The wind always blows above the water, and when a place protrudes as boldly into Lake Constance as Lindau, then it always means: equip yourself, even for turbulent times. Of course, you can't see this on the picturesque old town island. As little as the thousands and thousands of tourists who walk over the historic cobblestones every year suspect a magnetic center of the global scientific business at this point. A conference venue for highly decorated top researchers and selected young scientists from all continents who are looking for three constants of Lindau for a week: encounter, interaction, inspiration.

At this year's meeting, nothing was different in this regard from the end of June than usual in the past more than seventy years. And yet this wind was now felt, an emerging sharp wind of change, which noticeably captures events as traditional as this top research meeting on Lake Constance. In her opening speech to more than 30 Nobel laureates and a good five hundred young researchers from ninety countries, the German Federal Minister of Research and Education [Bettina Stark-Watzinger](#) called this the "disruptions" of our time, all crises that also demand a lot from science. "We are called upon to act," said the minister with regard to the climate crisis. But their view and that of all participants was already directed to the multitude of upheavals of our time by reading the one-week conference program and in other opening statements.

Corona, for example, the other most current global crisis, had provided a two-year presence moratorium of the Lindau meeting. The return from the virtual to the physical encounter in the still young new Inselhalle was a step back to the normality of the Lindau conferences, which was regularly dedicated to chemistry this year. And yet it was a back with new signs. The resilience of crisis and also the willingness of the sciences themselves to reform are now higher than ever on the agenda.

"There must be no political limits in science"

An emerging "cultural change", for example, was mentioned in one of the breakfast encounters of laureates with the offspring - a euphemism actually, because talking about change when many changes and adjustments are required at the same time can at best vaguely express the size of the tasks. For biochemist Randy Shekman, Nobel Prize winner in chemistry in 2013, who had the president of the *École polytechnique fédérale de Lausanne* (EPFL), Martin Vetterli, as an interlocutor at this morning event, this change is both internally and externally directed. For example, the message, which can be found in many research institutions, is directed outside and into the future not to break "bridges" into the unjust state of Russia - on the contrary: "There must be no political limits in science," Shekman said vehemently, and he also included China. Shekman left open how close these strategic cooperations should be in the future, to which institutional levels this proximity should and can apply.

In any case, after long internal debates, as they say, the Lindau Nobel Laureate Conference had joined a line issued by German organizations and Research Minister Stark-Watzinger: No contact with Putin-loyal institutions for the time being, but personal contacts with researchers should definitely be maintained - and can be expressed in joint publications. "Everything else would be poison," said Vetterli, and the computer scientist picked up Shekman's bridge image: "Brecked bridges are difficult to rebuild." For Lindau, in any case, the invited Russian top researchers had not been excluded. This also showed what was repeatedly addressed by the young and older participants: Science works best if it is inclusive.

Integration as a recipe for success remains undisputed even in times of multi-crisis, and yet it is quite rumbling. Cooperation, it was complained about, may be successful, it is not always rewarded. When awarding the Nobel Prize, for example, or in appointment negotiations for professorships, only individual performance counts. The fact that research successes are increasingly team successes - and much prefer to be seen in this way by young researchers - has so far hardly been taken into account by the scientific system. Publish or perish, the old slogan, still applies. Not at the EPFL, however, where a different selection principle is upheld instead of long publication lists and impact factors: Candidates select the three for the best publications in their opinion.

Far from diversity

Eliminating career obstacles and overcoming traditional undesirable developments was always an issue. Keyword: Diversity. How far away the traditional scientific business is from ensuring equal rights in terms of personnel was lamented, for example, complained by the Swedish chemist Pernilla Wittung-Stafshede, who made it clear that she is also promoting her commitment to gender issues as a member of the Nobel Prize Winners Committee on Chemistry. Unfortunately, there is hardly - or too little - change worldwide when it comes to diversity and equality. According to the reactions of the young listeners, the emotional state of aggregate is approaching a boiling point in this respect and the pressure for more modernity will grow.

The corona crisis has shown not least that all these desires for change as well as the foreseeable upheavals towards more openness - keyword open access - should also change the external relationship with society and politics. Stark-Watzinger summed it up with an almost provocative note in Lindau: "How political can science be?" she asked. You have a separation of powers as ever before: science provides insights, power remains in politics. So back to the limb? Looking at the debates of the two pandemic years, one could interpret the ministerial word as an invitation to reduce the politicization of knowledge - if it were not long ago clear to everyone who has carried out this politicization of experts above all: politics itself. In Lindau, in any case, the slogan was not: into politics or away with it. Rather, it was the new goal, often recognizable between the lines: open and have a social impact. Communicate more. However, young researchers are rarely trained at a peak for this role today.

What is the Nobel Laureate Conference?

The Lindau Nobel Laureate Conference is the largest annual meeting of Nobel laureates outside the Stockholm Nobel Prize ceremony. Founding fathers were the Lindau doctors Franz Karl Hein and Gustav Wilhelm Parade, who approached Count Lennart Bernadotte af Wisborg with the idea of a Nobel Prize winner's conference and implemented it together with him. Created first as a pure laureate meeting and from 1954 as a meeting of different generations and cultures of researchers, around 35,000 students, doctoral students and post-docs have had the unique pleasure of exchanging ideas directly with the greatest in their field since 1951.

The focus of the conferences changes annually: After chemistry this year, the 2023 meeting will be dedicated to medicine and physiology. An interdisciplinary conference takes place every five years, every three years the Lindau Conference of Economics. Since 2000, the Lindau Nobel Laureate Meetings Foundation has been the organizer, President of the Board of Trustees is Countess Bettina Bernadotte af Wisborg, daughter of the first President Count Lennart Bernadotte.

A scientific committee selects the young participants who are nominated by institutions worldwide. Over the decades, the committee itself has become increasingly internationalized and modernized in terms of content. In addition to lectures by the three to five dozen laureates, there are now many conversation formats in which the young researchers can discuss with the Nobel Prize winners. Time-critical and politically important, but also scientifically relevant topics such as climate change or nuclear armament have already been taken up and commented on with explanations from Lindau.

Source: F.A.Z.