OF SCIENCE



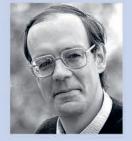
Manfred Eigen



Stefan Hell



Erwin Neher



Bert Sakmann

"Capital City of Nobel Laureates"

With a grand total of 46 awards, Göttingen can boast of more winners of the prestigious Nobel Prize than any other city in Germany - according to the newspaper Die Welt, this makes it the "capital city of Nobel laureates." One of them, Maria Göppert-Mayer, obtained her doctorate here with Max Born, who later won the Nobel Prize in Physics (1954). In 1930 she immigrated with her husband to the United States, and in 1963 she became the second woman in the world to win the Nobel Prize in Physics, the first being Marie Curie. Another winner, Enrico Fermi (Physics, 1938), did research with Max Born for only a few months during his studies here in 1923. Fourteen scientists were awarded the prize for the results of research conducted in Göttingen, nine of them before 1940: Otto Wallach (Chemistry, 1910), Johannes Stark (Physics, 1919), Walther Hermann Nernst (Chemistry, 1920), James Franck, (Physics, 1925), Richard Zsigmondy (Chemistry, 1925), Werner Heisenberg (Physics, 1932), Peter Debye (Chemistry, 1936), Adolf Otto Reinhold Windaus (Chemistry, 1938) and Adolf Butenandt (Chemistry, 1939).

Especially during the 1920s and early 1930s, Göttingen was considered a stronghold of the natural sciences. This period of success ended with the takeover of power by the National Socialists. Many Jewish scientists, including Max Born and James Franck (page 104), gave up in the face of the brown-shirted holders of power and the members of the university community who were integrated into the Nazi apparatus. Emigration, they decided, was their only option.

During the post-war years, other Nobel Prize winners -Otto Hahn (Chemistry, 1944), Max Planck (1918), Werner Heisenberg and Max von Laue (Physics, 1914) - came to Göttingen, where the Max Planck Society was founded in 1948 (page 54). But a great many top scientists, courted by the USA, chose to cross the Atlantic.

Nuclear physicists who stayed in Germany learned from Hiroshima and Nagasaki, at the latest. When German politicians, with Federal Chancellor Adenauer and Defense Minister Franz-Josef Strauß leading the way, planned to equip the German armed forces with nuclear weapons only two years after the A solemn moment in the summer of 2019: In the "Nobel-Rondell," an openair structure in the Old City Cemetery, Mayor Rolf Georg Köhler, together with Dr. Ruthild Oswatitsch-Eigen, the widow of the



plaque honoring her husband, who had died the previous February. In the background, the Göttingen heraldist and designer Hans Otto Arnold, creator of the Rondell. Arnold is the deputy chairman of the Göttingen City Council.

establishment of the Bundeswehr, a protest was lodged: the 1957 "Göttingen Manifesto," in which 18 physicists declared their opposition to this Cold War lunacy, including Nobel laureates Max Born, Otto Hahn, Werner Heisenberg, Max von Laue and Wolfgang Paul, who would receive his Nobel Prize in 1989. However, they did endorse the peaceful use of nuclear energy.

In 1967 another scientist associated with Göttingen, Manfred Eigen (Chemistry), was honored in Stockholm. He was followed in 1991 by Erwin Neher and Bert Sakmann (Physiology or Medicine) and in 2014 by Stefan Hell, the fourth scientist at the Max Planck Institute for Biophysical Chemistry to receive a Nobel Prize (page 55).

One year earlier, in 2013, the first "real Göttinger" finally won the coveted award: Thomas Südhof, born in Göttingen in 1955, received the Nobel Prize for Physiology or Medicine - for the results of research he had performed at Stanford University.

Nobel Prizes are wonderful. But over the almost 300-year history of the Georgia Augusta University, many brilliant minds have been at work in Göttingen: countless natural scientists and humanities scholars who have also excelled as scholars and teachers and in this way contributed to the renown of the "City of Science" ("Stadt die Wissen schafft") - and who continue to do so to this day.



Flooded with light: the gallery rooms create space for art - and for much more.



Mayor Rolf-Georg Köhler opens the exhibition "Göttingen cityscape" by Uwe Brandi.

The French Quarter at the city cemetery: Jazz at the Nobel plaza from the New Orleans Syncopators.

Versatile Gallery Brings Life to the Old City Cemetery

In the 19th century, when the increase in Göttingen's population was bringing its historic graveyards close to capacity, the municipal authorities adopted Mayor Georg Merkel's pro-

posal to establish a "central cemetery." The land for it was selected in 1879, on vacant municipal lands on the road to Grone next to the Jewish burial grounds. City architect Gerber, head of the municipal planning and building office, drew up a plan for generous cemetery grounds, patterning it after Stuttgart's recently created Pragfriedhof. The first section of the new city cemetery was inaugurated in 1881.

In addition to building two gatehouses, the plan also called for the construction of an impressive cemetery chapel. The design – again the work of city architect Gerber – was modeled on the Bismarck Mausoleum in Friedrichsruh. The cruciform structure, inspired by Byzantine and late Romanesque architecture, and the commanding crossing tower, give a dominant architectural emphasis to the cemetery.

Generous and mixed planting, particularly the tree-lined alleys, have made the setting park-like, contributed to its beauty, and created a richness and diversity that is very appealing to birdlife. The landscaped grounds, together with the historic monuments, give the Göttingen city cemetery a unified artistic appearance that, in its entirety, enjoys landmark status today.

When the new Parkfriedhof Junkerberg, a garden cemetery, was built in 1975 in the northern part of the city, the city ceme-

tery lost its function as the central burial ground. In the future, it will be developed into a public park. Of the 46 Nobel Prize winners associated

with the University of Göttingen, no fewer than nine are buried in the city cemetery. In 2006, the 125th anniversary of the cemetery, and in special



tribute to these scholars, a small outdoor memorial plaza was built in the form of Gauss's heptadecagon, its structure designed by Hans-Otto Arnold. The project was sponsored by the local beautification association, the Göttinger Verschönerungsverein e.V., and was inaugurated by Manfred Eigen, winner of the Nobel Prize in Chemistry.

The eastern gatehouse, originally built as a mortuary, was used as a chapel until 1900 and afterwards as an administrative building. It stood empty thereafter, a situation turned to good account by a community group. On their initiative, and with renewed support from the local beautification association, this building became an attractive meeting-place. A site associated with transience has been given new life as a cultural center, with a mix of information, music, and exhibitions. The historic architectural site, a landmark, with its lofty and spacious main galleries and leaded windows, lends the building great charm. In 2011, the "Torhaus-Galerie" (Gatehouse Gallery), which also houses a Nobel Prize winner's information center.

was opened to the public with an art exhibition and a welcoming speech by Nobel laureate Manfred Eigen. Artists display their work in four or five exhibitions each year, and concerts, performances, lectures and readings are also held here. Musical walking tours through the cemetery and guided tours focusing on the most notable graves or the meaning of gravestone symbols are also available.

An attractive venue for art, concerts, readings, and performances:
The Gatehouse Gallery (photos left and center). On the right:
Nobel Prize winner
Prof. Dr. Manfred Eigen speaks at the opening of the gallery.

Rust can be so beautiful: Reinhold Wittig with one of his imaginative art objects in the Gatehouse Gallery.





The East Turns Green - Thanks to Merkel's Beautification Association

With the planting of the Peace Oak above the Reinsbrunnen spring in April 1871, the legendary Mayor Georg Merkel launched his pet project: the reforestation of the Hainberg, east of the city. In his memoirs, Merkel described the impression this area made on the beholder: "The sight of the wasteland here is scarcely any bleaker and more cheerless than the view of the barren, gray limestone slopes glistening in the blazing sun in front of the city gates."



Before the planting could begin, a total of eighty cross-dams first had to be constructed in the Molkengrund, Lange Nacht and Steinsgraben ravines to prevent further erosion of the terrain. A welcome side-effect of this measure was the ability of the Reinsbrunnen spring to provide more

After Merkel's death, Mayor Calsow had a commemorative stone erected on the Hainberg in 1896, to honor him.

water. Merkel began the project by planting undemanding trees such as spruces, acacias, and birches, to which beeches, maples, chestnuts, cherry trees, and ash trees were later added.

Between 1871 and 1882, 100 hectares on the Hainberg were reforested, and by the time Merkel retired in 1893, the total had reached 150 hectares. Moreover, in 1880 the creation of the "Kaiserallee," running from Hainholzweg along the Reinsgraben creek, had begun. This project resulted in a pleasant footpath leading up the Hainberg.

From the outset, Merkel had not viewed the Hainberg area as a commercial forest, but rather as a park with well-chosen tree species, tree-lined avenues, and solitary trees, as well as paths, bridges, benches, and little shelters. The Göttingen Beautification Associa-

tion, established at his suggestion in 1876, championed the "layout, maintenance, and improvement of walks, and the beautification of public places and public structures of all kinds." This citizens' alliance is still in existence today.

Even after his retirement. Merkel - at the request of the city council - continued to be responsible for managing the upkeep and reforestation procedures on the Hainberg. His concept of natural forest management is still considered exemplary today, and in 1995, in an agreement with the environmental protection organization Greenpeace, the city pledged to respect the principles of naturecompatible forest use. Since 1997 the city forest has worked with Naturland, a registered association for organic agriculture.

The "Witch of the Hainberg"

In 1903, the orientalist Friedrich Carl Andreas and his wife, Lou Andreas Salomé, moved into a house on the Herzberger Landstraße. In 1914 Lou Andreas Salomé, a famous writer and psychoanalyst, opened the first psychoanalytic practice in Göttingen. Her unconventional lifestyle soon caused the virtuous citizens of Göttingen to label her the "witch of the Hainberg." In her memoirs, *Lebensrückblick* (published in English

as Looking Back), she wrote about "Loufried," her home: "As if by a small, redeeming miracle, we found our little half-timbered house in an old orchard up on Rohn's plateau. At the time, the surrounding area was still so secluded that young fox cubs even made an appearance one day at the far corner of the long garden."

