Musical romantic

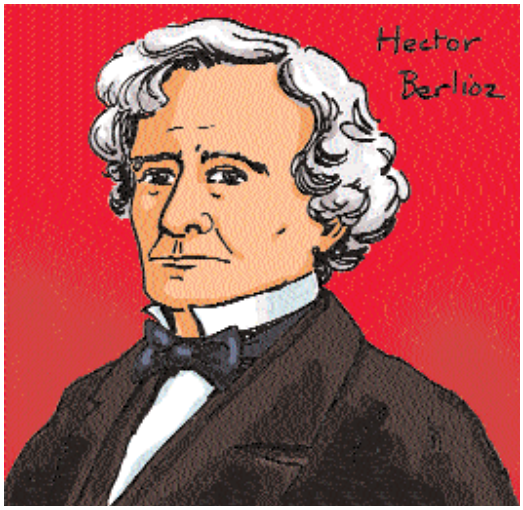
Next week sees the bicentenary of the birth of the composer Hector Berlioz. "I was born," he wrote, "on 11 December 1803 in La Côte Saint-André, a very small French town in the department of Isère between Vienne, Grenoble and Lyons."

Hector's father, Louis Berlioz, was a local doctor, hard-working and greatly respected, who sent him to a secondary school with the object of learning Latin, but soon withdrew him to be educated at home, teaching him languages, literature, history, geography and music. Hector spent his holidays with his mother and sisters at Meylan, close to Dauphiné and the Basses Alpes. Nearby was the villa of Madame Gautier, who had two nieces. With the younger of these, Estelle, Hector fell madly in love. He retained this affection to the end of his chequered life.

Meanwhile Hector discovered a flageolet on which he performed airs. His father introduced him to musical notation and presented him with a flute. He also learned to play the guitar, but his father sternly forbade him the piano, fearing that it might engross him too firmly in his music. Louis intended his son for the medical profession. Hector was not keen on this. ' Without being sure what I felt," he noted in his memoirs, "I had a strong presentiment that my life was not going to be spent at the bedsides of the sick, in hospitals and dissecting rooms."

Nevertheless, with his cousin Alphonse Robert, who later became a famous Paris doctor, Hector arrived in the capital in 1822 to start anatomy studies at the Hospice de la Pitié. Here he was appalled by the fragments of bodies, the blood and tissues underfoot, the swarms of sparrows fighting over scraps of lung, and the rats gnawing vertebrae in the corners. However, he resigned himself to anatomy, and found consolation in the lectures given at the Jardin des Plantes by Thénard in chemistry and Gay-Lussac in physics. But once he had discovered the delights of the musical scores he found in the library of the Conservatoire he deserted the dissecting-room for good to become (in the description of the 'Oxford companion to music') "the greatest musical figure in the French Romantic movement".

In his impact on society, Berlioz was a problem to many of his contemporaries. His inamoratas ranged from Estelle of his boyhood to Harriet Smithson, the Irish actress, whom he married in Paris in 1833, and who died in 1854. His second wife was Marie Recio, who died in 1862. In his youth he had a dramatic experience with Marie Moke, a distinguished pianist with whom he became infatuated. He was in Italy in 1831, and while in Florence learned that Marie had married Camille, the pianist son of the famous Parisian piano-maker Ignace Pleyel. "Two tears of rage started from my eyes. In that instant I knew my course; it was to go at once to Paris and there kill without compunction two guilty women and one guilty man." Hector ordered a lady's-maid outfit to be made for him, and purchased pistols. He planned to make his way in disguise into the Pleyel home and kill those he thought guilty. Fortunately, travel difficulties defeated him and, in due course, he married Harriet.



With concert hall and theatre officials Hector also had many tussles. He had a passion for enormous orchestras, and for choirs of several hundred. One orchestral arrangement of his called for 240 strings, 30 grand pianos, 30 harps plus wind and percussion to match. He is best known for his *Symphonie Fantastique*, *Harold en Italie*, and *Damnation de Faust*, but he was responsible for more than 40 major works, as well as books on instrumentation and the art of conducting. Berlioz died on 8 March 1869 in Paris.

Conspiracy to cheat

In view of the publicity recently given to attempts of competing athletes to obtain an unfair advantage over others by taking drugs, particularly anabolic steroids, which they believe improve physical performance, it is disquieting to learn of new steroids that may, for a time at any rate, be undetectable. The latest steroid to be abused is tetrahydrogestrinone (THG), which is structurally similar to gestrinone, which is banned in sport. But unlike gestrinone, the tetrahydro derivative is not detected when standard tests of urine are made (*PJ*, 1 November, p608).

The head of the United States Anti-Doping Agency claimed on 16 October to have uncovered a conspiracy to supply the new drug through a California laboratory, which has denied the charge. Tests for THG have now been developed by the agency and will be used for urine tests in future. Urine samples collected in previous events such as the World Championships in Athletics held in Paris in August are to be retested in the light of the new revelations.

According to a report published in the 23 October issue of *Nature*, there are no legal liabilities which would prevent chemists from developing new steroids, since the US Controlled Substances Act applies to them only if they can be proved to build muscle. For many compounds this activity may be elusive.

Food and genes

A new science-based study called nutrigenomics has been created, to add to the many complications that arise whenever the sticky subject of genetic inheritance is raised. An International Nutrigenomics Conference was held recently in Amsterdam. Since this is the second conference held under this title, the question of how nutriments interact with genes to produce health or disease cannot be as novel as it appears, but it must be regarded as an emerging study which demands close attention in our gene-sensitive culture.

According to the researchers who gathered in Amsterdam on 6 November, nutrigenomics is making rapid progress and is attracting the interest of people in the food industry who see in it a means of promoting their products. Grants to support nutritional genomics have been established in the United States and in Europe, with joint funding by governments and the food industry. Warnings have nonetheless been voiced by those undertaking the research that progress is in danger of proceeding too rapidly for the safety of the public. Interested parties have already voiced some extravagant claims, and both scientific and ethical considerations have to be addressed.

Work so far has been directed towards noting the general responses of genomes in mice to nutrients, but this scant advance has been used by firms to determine what vitamins a person should be taking, on the basis of genetic inheritance. Some companies that have tried to establish genetic profiles from patients' tissue samples have sold such results to other commercial enterprises, which is considered unethical.

The ability of a patient to give consent to such transactions is thought to be doubtful. However, since effects of research could impinge on the essential habit of consuming food, scientists must talk to the public about the issues involved, before any products are recommended. And the genomics of food abut on those of drug therapy, and call for the same degree of precaution.