From the base of Napoleon’s great oak, walk down to the stone bench situated nearby.

1. THE CHAMBERONNE
Behind the Unithèque building there is a fine circle of trees situated on the crest of an old glacial moraine. Behind this moraine flows the River Chamberonne. At this point the river is slow moving because of the local topography. It passes round this morainal hill before wending its way to the lake through the UNIL sports grounds. Etymologically, Chamberonne means “river with crayfish”. Are any still living in it?

2. THE 10 METRE TERRACE
Over the centuries the level of the lake has not always been the same. Around 10,000 years ago, it was 10 metres higher than it is today. Rivers deposited sediment as they flowed into the lake. This formed a delta which, as the level of the lake fell, became a kind of flat terrace located some ten metres above the level of the lake today. During construction of the Anthropole building, sediment deposited at that time was extracted from the foundations and dated by the carbon-14 method, confirming it to be 10,000 years old.

3. THE USE OF WATER IN BYGONE TIMES
Before the massive use of coal in the 19th century, and then oil, water was an indispensable adjunct to small factories and mills, etc. This was the case on the Dorigny estate too, where water power was used by Jean-Rodolphe de Loys. In 1706, a paper mill was established in the bend of the Chamberonne where the present-day Château de Dorigny now stands. It was connected to the river by a channel. Some decades later, the paper mill was joined by a laundry (for hemp cloth) and a forge. This small-scale industrial activity was quickly abandoned in the second half of the 18th century.

In the 1960s, the State of Vaud purchased the land of the Dorigny estate from a well established family, the Loys. This family lived on the estate, by and large due to the nearby presence of the rivers Mèbre, Sorge and Chamberonne. This walk by the water’s edge spans the decades between past and present.
Just after the bridge, follow the path on your right and discover the trees running alongside it.

### 4. THE TREES BY THE PATH

Let’s look in detail the trees lining the path between the two bridges at the river’s edge. The first, with its palmate leaves, is a chestnut. A little further, the large tree with its trunk split in two is an ash, its large composite leaves made up of a number of smaller leaves (leaflets). The next is a maple. This is followed by an enormous plane tree, which has leaves virtually identical to those of the maple but a different trunk whose bark comes away in irregular platelets. Lastly, a fine hornbeam with serrated leaves completes this roll-call of natural splendour. It is a species that can be found on the other side of the path, where individual examples are smaller in size. Of all these trees, the ash is the one most at home by the side of rivers in the region’s countryside.

At the end of the path, cross the bridge on the right, then follow the small road uphill. A little higher on your left, you can see vines below.

### 5. ABOUT AN INVASIVE PLANT

Here, small clumps of plants growing by the river’s edge are a common sight. They are Japanese knotweed. This exotic species is on Switzerland’s blacklist of invasive plants (along with around twenty others). A plant is said to be invasive when it takes the place of indigenous varieties, disturbing the balance of nature. At UNIL, knotweed is the invasive plant which causes most concern. It can be found in a number of places: along the course of the Chamberonne, by the side of the lake, near the Sports Hall, etc. Banned from garden centres since 2008 (whence it came, having been planted in private gardens), this plant spreads quickly thanks to its large underground networks of roots (rhizomes). In addition, because visible parts of the plant disappear in winter, the bare earth is highly exposed to erosion. There does appear to be a solution to eradicate it: cut it back and intensify the planting of indigenous species.

At the top of the hill at the end of the road, continue straight ahead by the side of the metro track. This path then descends steeply to the left (steps). At the end of the path, turn left along the wide lane. Cross at the pedestrian crossing, turn left, and then right. After 1 minute, turn right along the forest path and continue straight ahead on flat ground. A little further, cross the River Chamberonne by means of a footbridge.

### 6. THE SILLS

In this area the river is home to several species of fish, such as brown trout, barbel (a member of the carp family) and minnow. Trout are a migratory species living most often to adult age in the lake, however they return to the rivers in winter and head upstream to reproduce. The fish pass, which here takes the form of a succession of sills, is a system which makes this migration possible over a section previously inaccessible due to excessive height differences (because of a large waterfall for example). The sills are generally no more than 40 cm high, which means that trout can easily get over them. They are part of a series of actions to renaturalise rivers.

Continue along the river until you come to a second footbridge.

### 7. MÈBRE + SORGE = CHAMBERONNE

Here you are at the confluence of two rivers: the Mèbre (completely on the left-hand side) and the Sorge (in front of you). Downstream the river is called the Chamberonne and runs into the lake after crossing the campus. The River Mèbre has its source in the Jorat woods and flows through Cheseaux, then Crissier and Renens, after winding its way through some impressive gorges. The Sorge also has its source near Cheseaux, passes close by Villars-St-Croix, then flows through Crissier and Ecublens. Near its source it is called… the Chamberonne!

After crossing this footbridge, you can complete a small 10 minute loop to discover the Mèbre upstream (skip a paragraph to continue your walk without completing the loop). This paragraph describes the loop: after the footbridge, turn right, then right again along the road, which you can then cross at the next pedestrian crossing. Facing the metro lines, turn left. At the next fork, turn right, then straight away turn left onto the path bordering the woods. At the next fork, turn left along the untarred path. The Mèbre is on your right behind the trees. At the end of the track, head back down the path that brought you here to complete the loop. By the footbridge, continue along the Sorge (river on your left) which can be crossed a little further on by means of a third footbridge.

### 8. THE BEAVER AND OTHER ANIMAL SPECIES

The beaver disappeared from the Lake Geneva basin at the beginning of the 19th century. Its reintroduction, which began at the end of the 1950s in the River Versoix near Geneva, continued two decades later in the River Venoge. Since then a number of beavers have made their home in the River Sorge, not far from here. In places you may be able to see the characteristic markings on trees where these formidable rodents have exercised their teeth. Sometimes dippers can also be seen in the river. A brown and white bird about the size of a blackbird, it feeds by walking up the riverbed against the current when the water is not too deep. There are many other birds in Dorigny woods (jays, owls, etc). Their presence is encouraged by the placing of nesting boxes. Also living in the woods are foxes, badgers, hedgehogs, red squirrels and bats.

Walk up the main forest path which begins with steps. At the top of the incline, at the fork, turn right to rejoin the path bordering the woods. Then follow the path on your left. At the next fork in the path, walk down to your left to rejoin Napoleon’s majestic oak tree.