The general theme of this talk is binary classification. Driven by the paradigm that this can perhaps be achieved by combining independent “cells”, consider this scenario: binary classification is to be done by a tree method in which the leaves of a tree correspond to a partition of d-space. Within a partition, a majority vote is used. Suppose furthermore that this tree must be constructed recursively by implementing just two functions, so that the construction can be carried out in parallel by using “cells”: first of all, given input data, a cell must decide whether it will become a leaf or internal node in the tree. Secondly, if it decides on an internal node, it must decide how to partition the space linearly. Data are then split accordingly into two parts and sent downstream to two new independent cells. We discuss the design and properties of such classifiers.