Although the ease and reliability of paternity testing has drastically increased over the past 10 years, there are still many obstacles to overcome. These obstacles represent technical, reporting, and social barriers to the DNA testing laboratory. Three cases will be presented highlighting these problems. Although the technical aspects of paternity testing have improved considerably over this time period, the quality of the paternity testing can still be related to the quality of the sample, the source from which the sample was drawn, and the appropriate DNA concentration. From a reporting aspect, one unique dilemma arises when individuals who are closely related are all considered possible alleged fathers in an individual case. This situation is particularly magnified when individuals are tested without the maternal contribution or in family reconstruction cases. This issue is further complicated when considering a higher than expected percentage of cases with apparent double mutations. With the evolution in the field of genetics over the past several years, many interesting social issues have arisen, many of which affect the DNA testing laboratory. These issues remain hurdles for the paternity laboratory to evaluate in the coming years.