A Play For Genetics Lab

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A number of years ago, GENESYStems designed a teaching unit for freshman-level genetics entitled Chances’ Choices. It is a fun, soap-opera story of the Chance family, a family that is plagued with genetic disorders. Nine genetic situations are dealt with (chromosomal, Mendelian, multi-factoral and sex-linked) in the story. Over the years, I have played around with this unit for my non-majors biology course. The lab instructors would present the story using overheads to explain the disorders and pedigrees to show inheritance. Some lab instructors could do a great job presenting the material, while others were dry and boring.

Two years ago I turned this soap-opera into a play. The students act out the parts of the Chance family and genetic counselor while the lab instructor gives background information between scenes. The lab sessions appear to more enjoyable now and hopefully, the students learn from the experience.

For the lab grade, each student must make a pedigree of the extended family and the genetic disorders. At the end of the play the students work in groups to discuss ethical issues that have arisen during the presentation. Each group hands in a written report of their responses to the discussion questions.

Kloza, Edward M. and Paula K. Haddow, 1988, Chances’ Choices, GENESTStem, Scarborough, ME.