bloodwork
IMAGES IN HEMATOLOGY

Fauxcoll gradient

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I am happy to report the successful conclusion of home experiments directed at meeting the well-known need, too long unmet, for a potable facsimile of a blood sample separated over a Ficoll gradient. As a service, I provide the protocol below.

First, mix each master mix thoroughly:

- Layer 1: 1:1 mix Chambord:grenadine syrup.
- Layer 2: 1:1 mix Hungarian apricot brandy (barack palinka):simple syrup.

Any clear, colorless 40% alcohol spirit may be substituted for the apricot brandy, although the taste will change, surely for the worse. Simple syrup is made by dissolving 1 cup sugar in 1 cup boiling water, and cooling.

- Layer 3: 2:1 mix vodka:limoncello.

The following volumes are then carefully pipetted, in order, into a tall shot glass. (In this singular instance, mouth pipetting is an acceptable risk.):

- Layer 1: 5 mL
- Layer 2: 15 mL
- Layer 3: 15 mL

At this point, the investigator will have a red layer at bottom (red blood cells), a clear, colorless middle layer (the Ficoll), and a straw-colored top layer (the plasma). To produce the white blood cell layer, introduce a pipette containing 1 mL skim milk into the interface between layers 2 and 3. Slowly dispense the skim milk, distributing throughout the layer. The 3 layers may be prepared first and the skim milk added right before serving, as the skim milk layer may diffuse over time.

The result, shown in the figure, is sweet and fruity, may be chilled if desired, and is best enjoyed with a hematologist.