1125-AF-616 **Allison Henrich*** (henricha@seattleu.edu). *Knot Fertility and Heredity.* Preliminary report.

In this talk, we will introduce and explore the following new knot theoretical notions. A knot D is said to be a *descendant* of another knot P if there is a minimal crossing diagram of P on which some subset of crossings can be changed to produce a diagram of D. In this case, P is said to be a *parent* of D. A knot P is *fertile* if all knots with smaller crossing number are descendants of P. More generally, a knot K is *n-fertile* if all knots with crossing number less than or equal to n are descendants of K. We will discuss families of related (and insular) knots as well as knots that have many parents and knots that are particularly fertile.

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