Drosophila has proven a powerful context for the analyses of developmental signaling, both in terms of the transduction and modulation of such signals, and their regulation of growth, patterning and planar polarity in a complex multicellular environment. My laboratory has been investigating especially the signaling mediated by binding between the giant protocadherins Fat and Dachsous, and how the intracellular domains of these proteins regulate both the growth-regulating Hippo and planar cell polarity pathways. Our recent results link the Fat ICD to the accumulation and apical trafficking of an eccentric batch of effectors: the type XX myosin Dachs, the DHHC palmitoyltransferase Approximated, and the scaffolding proteins Dlish and Expanded. I will also briefly discuss some recent work investigating a separate, basal type of polarization, manifest in the basal “cytoneme” cell processes of the developing wing, and the adjacent basal lamina.

Dr. Seth S. Blair
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Host: Dr. Helen McNeill
Date: Thursday November 30th, 2017
Time: 3:30PM
Place: CCBR Red Seminar Room, 160 College Street