Formation of α-Chiral Centers by Asymmetric β-C(sp<sup>3</sup>)–H Arylation, Alkenylation, and Alkynylation

**Science** 2017, 355, 499–503.

**Palladium-Catalyzed Asymmetric C–H Functionalizations of Isobutanamides**

**Significance:** Desymmetrization of isopropyl moieties has remained an unanswered challenge. The authors have developed new ligands for the formation of a chiral center at the α-position of isobutyric acid derivatives through β-C(sp<sup>3</sup>)–H functionalization.

**Comment:** This palladium-catalyzed protocol promotes an asymmetric β-C(sp<sup>3</sup>)–H arylation, alkenylation, or alkynylation to form a chiral center at the α-position of a range of isobutyric acid derivatives with moderate yields and excellent enantioselectivities.