Our romp through the common dative ligands continues with the **N-heterocyclic carbenes** (NHCs). Although we'll tackle carbenes in general in another post, NHCs deserve their own nod due to their unique structure, properties, and steric tunability. Unlike most metal carbenes, NHCs are typically unreactive when coordinated to a metal (with some exceptions). Like phosphines, they are commonly used to modulate the steric and electronic properties of metal complexes. In fact, the similarities between NHCs and phosphines are notable. Overall, few ligands are as effective as NHCs at ramping up the electron density on a metal center while remaining innocent.

![NHC structure]

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**Contributors and Attributions**

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