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Convenient Synthesis of 4-Trifluoromethyl-Substituted Imidazole Derivatives

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Mesoionic 4-trifluoroacetyl-1,3-oxazolium-5-olates (**1**), obtained from the reaction of *N*-acyl-*N*-alkylglycines (**2**) with trifluoroacetic anhydride, react with ammonia to give 4-trifluoromethyl-3,4-dihydroimidazoles (**3**) in high yields. Dehydration of **3** gives 4-trifluoromethylimidazoles (**4**) in high yields. The novel ring transformation of **1** into **3** occurs *via* a regioselective attack of ammonia on the C-2 position of the ring.