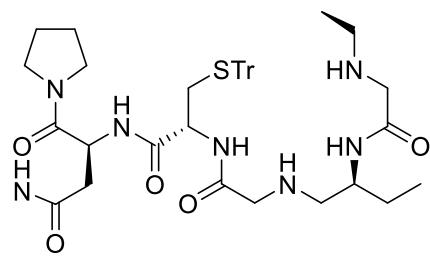
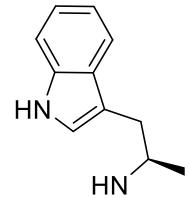


Synthesis of the Death-Cap Mushroom Toxin -Amanitin

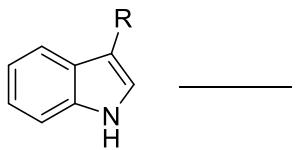
Kaveh Matinkhoo, Alla Pryyma, Mihajlo Todorovic

Retrosynthesis

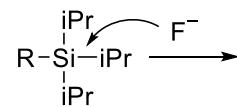




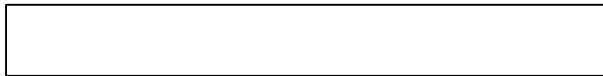
Silyl group protection



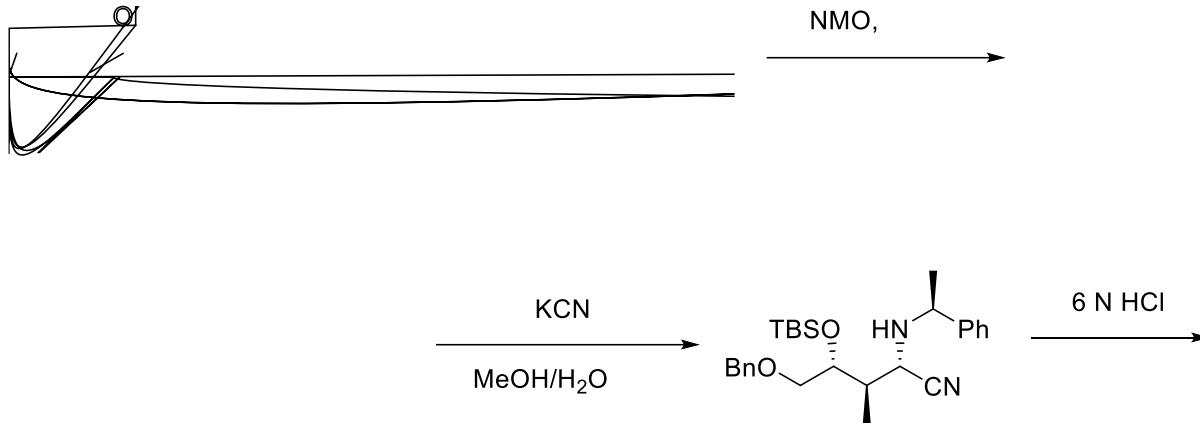
Silyl deprotection by fluorine



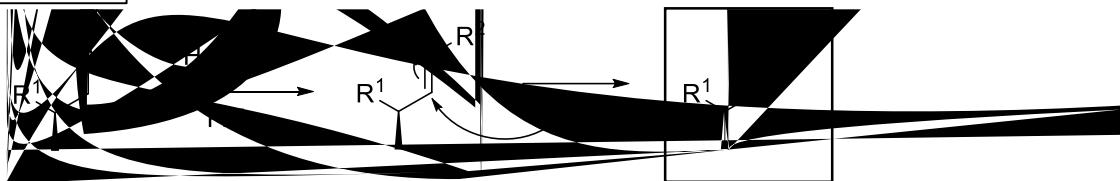
Ir-catalyzed C-H borylation



Trityl

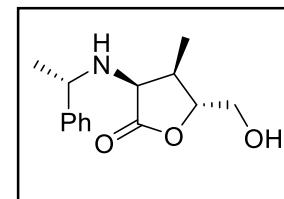
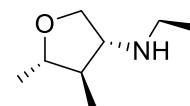


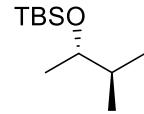
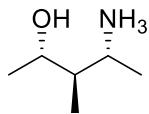
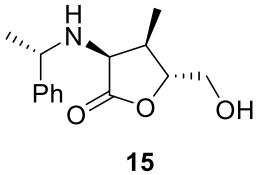
Imination-cyanation



Lactonization

TBSO
—

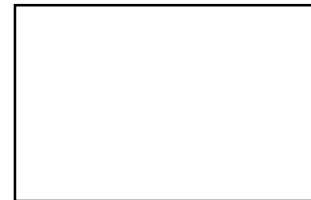




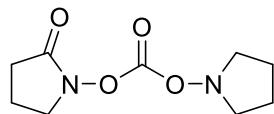
Pd-catalyzed benzylic deprotection

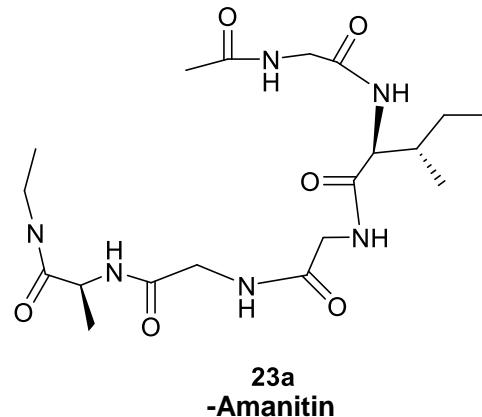
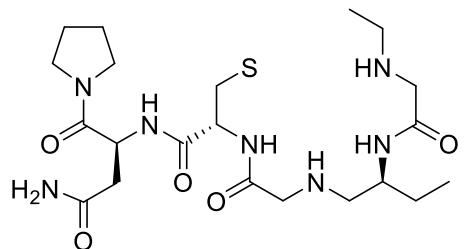


Fmoc protection

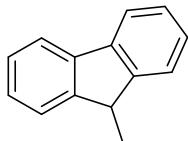


Succinimidyl activation

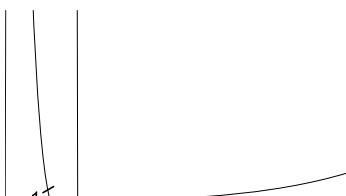




Fmoc deprotection



HATU amide coupling



mCPBA sulfoxidation

