N. WINTER, D. TRAUNER* (LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN, GERMANY AND NEW YORK UNIVERSITY, USA)
Thiocarbonyl Ylide Chemistry Enables a Concise Synthesis of ( $\pm$ )-Hippolachnin A J. Am. Chem. Soc. 2017, 139, 11706-11709.

## Total Synthesis of ( $\pm$ )-Hippolachnin A



Significance: Hippolachnin A is a polyketide isolated from a marine sponge showing potent antifungal activity against the opportunistic fungus $C$. neoformans. The Trauner group reports a concise route to this synthetic target, which is attractive both in terms of bioactivity and a unique molecular scaffold.

Comment: Known compound $\mathbf{A}$ is accessible through a photochemical route. Few synthetic manipulations yield $\mathbf{D}$, which undergoes an ylide cycloaddition as a way to install the two exo-positioned ethyl groups. Tin-catalyzed O-alkylation of $\mathbf{H}$ followed by desulfation delivers ( $\pm$ )-hippolachnin A.

## Gategory

Synthesis of Natural Products and Potential Drugs

## Key words

## polyketides

## gracilioethers

ylide cycloaddition
hippolachnin A


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[^0]:    SYNFACTS Contributors: Erick M. Carreira, Philipp Sondermann
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