

Publication

A Unified Approach for the Stereoselective Total Synthesis of Pyridone Alkaloids and Their Neuritogenic Activity

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**ID** 1008035**Author(s)** Schumacher, Andreas; Jessen, Henning J.; Shaw, Trawis; Pfaltz, Andreas; Gademann, Karl**Author(s) at UniBasel** [Gademann, Karl](#) ; [Pfaltz, Andreas](#) ;**Year** 2011**Title** A Unified Approach for the Stereoselective Total Synthesis of Pyridone Alkaloids and Their Neuritogenic Activity**Journal** Angewandte Chemie International Edition**Volume** 50**Number** 18**Pages / Article-Number** 4222-4226**Keywords** farinosone A, militarinone D, neurite outgrowth, neurochemistry, pyridone alkaloids

Unus pro omnibus: The development of compounds inducing neurite outgrowth might constitute a valuable approach for the non-invasive medical treatment of neurodegenerative diseases. With the aid of a bifunctional building block, the total syntheses of a group of pyridone polyenes originally produced by entomopathogenic fungi was achieved (see picture). All of these natural products displayed neuritogenic activity in the PC-12 cell line.

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