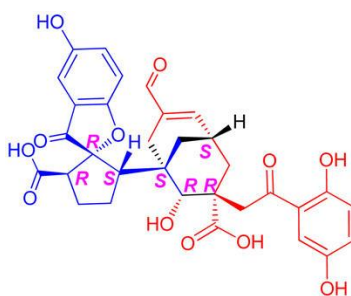


Retrosynthesis Exercise

The natural product on which you will have to work is the Applanatumin A. It is a new dimeric meroterpenoid isolated by the Chinese group of Cheng (*Org. Lett.* **2015**, *17*, 1110-1113) from *Ganoderma applanatum* that displays potent antifibrotic activity. It possesses a new hexacyclic skeleton containing a spiro[benzofuran-2,1'-cyclopentane] motif.



Applanatumin A

Aim of the game:

- Propose a retrosynthetic analysis with relevant disconnections until commercially available starting materials, then,

- Show the synthetic pathway with the conditions for each steps, using eventually if necessary literature data.

Important: the synthesis must be enantioselective. Do not use the biosynthetic pathway proposed in the article. Of course it is a team work, so organize yourself to do it.

Teams composition:

Team 1	Team 2	Team 3
David	Carole	Yirong
Ophélie	Valmik	Vivek
Fabien	Yohan	Mylène
Anthony	Cecilia	Maxime
Thibault	Bilal	Ronan

Let's go !