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## Chemical synthesis of fragments of galactosaminogalactan and pel polysaccharides

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## List of Publications

1. Bamford, N.C.; Mauff F.; Van Loon, J. C.; Ostapska, H.; Snarr, B. D.; Zhang, Y.; Kitova, E. N.; Klassen, J. S.; Codée, J. D. C.; Sheppard, D. C., Howell, P. L. Structural and biochemical characterization of the exopolysaccharide deacetylase Agd3 required for *Aspergillus fumigatus* biofilm formation. *Nat. Commun.* **2020**, *11*: 2450.
2. Wang, L.; Zhang, Y.; Overkleeft, H. S.; van der Marel, G. A.; Codée, J. D. C. Reagent Controlled Glycosylations for the Assembly of Well-Defined Pel Oligosaccharides. *J. Org. Chem.* **2020**, *85*,15872-15884.
3. Zhang, Y.; Gomez-redondo, M.; Jimenez-Oses, G.; Arda, A.; Overkleeft, H. S.; van der Marel, G. A.; Jimenez-Barbero, J.; Codée, J. D. C. Synthesis and Structural Analysis of *Aspergillus fumigatus* Galactosaminogalactans Featuring  $\alpha$ -Galactose,  $\alpha$ -Galactosamine and  $\alpha$ -N-Acetyl Galactosamine Linkages. *Angew. Chem., Int. Ed.* **2020**, *59*, 12746-12750.
4. Alex, C.; Visansirikul, S.; Zhang, Y.; Yasomanee, J. P.; Codée, J. D. C.; Demchenko, A. V. Synthesis of 2-azido-2-deoxy- and 2-acetamido-2-deoxy-D-manno derivatives as versatile building blocks. *Carbohydr. Res.* **2020**, *488*, 107900.
5. Bamford, N.; Mauff, F.; Subramanian, A.; Yip, P.; Millan, C.; Zhang, Y.; Zacharias, C.; Forman, A.; Nitz, M.; Codée, J. D. C.; Uson, I.; Sheppard, D.; Howell, P. L. Ega3 from the fungal pathogen *Aspergillus fumigatus* is an endo- $\alpha$ -1,4-galactosaminidase that disrupts microbial biofilms. *J. Biol. Chem.* **2019**, *294*, 13833-13849.
6. Mauff, F.; Bamford, N.; Alnabelseya, N.; Zhang, Y.; Baker, P.; Robinson, H.; Codée, J. D. C.; Howell, P. L.; Sheppard, D. C. Molecular mechanism of *Aspergillus fumigatus* biofilm disruption by fungal and bacterial glycoside hydrolases. *J. Biol. Chem.* **2019**, *294*, 10760-10772.
7. Sun, P.; Wang, P.; Zhang, Y.; Li, M. Construction of  $\beta$ -Mannosidic Bonds via Gold(I)-Catalyzed Glycosylations with Mannopyranosyl *ortho*-Hexynylbenzoates and Its Application in Synthesis of Acremomannolipin A. *J. Org. Chem.* **2015**, *80*, 4164-4175.
8. Zhang, Y.; Wang, P.; Song, N.; Li, M. Bromodimethyl-sulfonium bromide/silver triflate-promoted glycosylations using glycosyl allenoates as donors. *Carbohydr. Res.* **2013**, *381*, 101-111.
9. Chen, P.; Zhang, Y.; Wang, P.; Li, M. Synthesis of  $\beta$ -D-mannuronic acid disaccharide fragments. *Chinese Journal of Marine drugs*, **2014**, *33*, 63-68. (in Chinese)

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