

Phone: +33 (0)2 98 01 67 13  
Mail: [wilfried.berthe@univ-brest.fr](mailto:wilfried.berthe@univ-brest.fr)  
Room C130

Web : <http://www.univ-brest.fr/cosm>  
Twitter: @Cosm\_Cemca

## Research interest

*Keywords: Organic synthesis, phosphorus chemistry, fluorescent probes, saccharidic chemistry.*

Organic synthesis of amphiphilic compounds as non-viral gene delivery vectors. Synthesis of glycolipids as modulator of SK3 ionic channel. Synthesis of fluorescent labeled amphiphiles.

## Background

- Since Dec 15* ⇒ Engineer (Université de Bretagne Occidentale, Brest, France)  
**UMR CNRS 6521** CEMCA Laboratory, Team COSM, directed by Pr. P.A. Jaffrès.  
50% Research / 50% Practical support.
- Apr 14 – Aug 14* ⇒ Engineer (Université de Lorraine, SynBioN Platform, Nancy, France)  
Research Project: Setting of the platform equipments and first project synthesis.
- Feb 13 – Jan 14* ⇒ Engineer (Université de Bretagne Occidentale, Brest, France)  
**UMR CNRS 6521** (BREST), CEMCA Laboratory, Team "Phosphorus and Vectorization", directed by Pr. P.A. Jaffrès.  
Research Project: (Cancéropôle Grand Ouest) : *Synthesis and studies of glycolipids for the modulation of SK3 channel.*
- Feb 12 – Feb 13* ⇒ Engineer (Université de Bretagne Occidentale, Brest, France)  
**UMR CNRS 6521** (BREST), CEMCA Laboratory, Team "Phosphorus and Vectorization", directed by Pr. P.A. Jaffrès.  
Research Project: *Synthesis of fluorescent lipophosphoramidates to track synthetic vectors.*
- Feb - Aug 10* ⇒ Master's internship in organic chemistry, Idealp-Pharma, Lyon, France  
Research project: Synthesis of Cystathionine Beta Synthase (CBS) gene inhibitor.
- Aug 08 - Jul 09* ⇒ Master's internship in organic chemistry, Santhera Pharmaceuticals, Liestal, Swiss  
Research Project: Synthesis of Melanocortin 4 receptor antagonist.

## Education

- 2010* Engineering Degree in Chemistry from ENSCMu, Mulhouse, France  
Master's Degree in Organic and Bioorganic Chemistry, Mulhouse France

## Teaching activities

Management and organization of the equipments and rooms of the chemistry laboratory and practical classes (License).

## Other

Website administrator: <http://www.univ-brest.fr/cosm>

Twitter: @Cosm\_Cemca

## Scientific production and Conferences

**Poster:** SCF, May 2013, Aber Wrac'h: "Synthesis of fluorescent lipophosphoramidates"

### Publication:

■ Glyco-Phospho-glycero-ether lipid as modulator of SK3 ion channel and SK3-dependent cancer cell migration. Sevrain, C. M.; Berthe, W.; Couthon-Gourvès, H.; Haelters, J.P.; Bouchet, A. M.; Potier-Cartereau, M.; Vandier, C.; Jaffrès, P.A.

*Phosphorus, Sulfur, and Silicon and the Related Elements*, **2016**, 1623-1624, [DOI: 10.1080/10426507.2016.1217221](https://doi.org/10.1080/10426507.2016.1217221).  
Published online, August, 17th, 2016

■ Synthetic phospholipids and phospho-bola-amphiphiles for nucleic acid delivery.

Berchel, M. ; Lozach, O. ; Berthe, W. ; Hernot, S. ; Couthon-Gourvès, H. ; Mottais, A. ; Le Gall, T. ; Midoux, P. ; Montier, T. ; Jaffrès, P.A.

*Phosphorus, Sulfur, and Silicon and the Related Elements*, **2016**, 1485-1487, [DOI:10.1080/10426507.2016.1212049](https://doi.org/10.1080/10426507.2016.1212049).  
Published online July, 22nd, 2016.

■ [New disaccharides-based ether lipids for the inhibition of SK3 ion channel.](#)

Berthe, W.; Sevrain, C.M.; Chantôme, A.; Bouchet, A.M.; Gueguinou, M.; Fourbon, Y.; Potier-Cartereau, M.; Haelters, J.P.; Couthon-Gourvès, H.; Vandier, C.; Jaffrès, P.A.

*ChemMedChem*, **2016**, 11, 14, 1531–1539, [DOI: 10.1002/cmdc.201600147](https://doi.org/10.1002/cmdc.201600147).

Published online: 9 June 2016

■ Evaluation of New Fluorescent Lipophosphoramidates for Gene Transfer and Biodistribution Studies after Systemic Administration

Belmadi, N.; Berchel, M; Denis, C.; Berthe, W.; Sibiril, Y.; Le Gall, T.; Haelters, J-P.; Jaffrès, P-A.; Montier, T.

*International Journal of Molecular Sciences*, **2015**, 16 (11), 26055-26076, [DOI:10.3390/ijms161125941](https://doi.org/10.3390/ijms161125941) (registering DOI)

Published: 2 November 2015