

François Hallé  
PharmD  
PhD in Organic Chemistry

Born May 7<sup>th</sup> 1989  
2 kids  
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## Research

- 09/2019 -** Assistant Professor in Medicinal Chemistry  
ISPB – Faculty of Pharmacy, Campus Rockefeller  
[COSSBA Team – ICBMS – UMR 5246 – Université Claude Bernard Lyon 1](#)
- 01/2018 – 08/2018** Post-doctoral Researcher  
*Synthesis of urea based foldamers as protein-protein interaction inhibitors*  
Peptidomimetic chemistry team of Dr. Gilles Guichard  
[CMBN @IECB – UMR5248 – Université de Bordeaux](#)
- 09/2017 – 09/2018** Assistant Lecturer in Organic and Medicinal Chemistry  
*Synthesis of cyclic pseudopeptides stabilizing G-quadruplexes.*  
Team of Pr. Jean Guillon  
[ARNA – UMR5320/U1212 – Université de Bordeaux](#)
- 08/2016 – 08/2017** Post-doctoral Researcher – Fulbright Fellowship  
*Enzymatic synthesis of emissive derivatives of NAD<sup>+</sup> to evaluate their activity in different biological models.*  
[Yitzhak Tor Lab – University of California San Diego](#)
- 10/2012 – 12/2015** PhD in Organic Chemistry – MENRT fellowship  
*Conception, development, and synthesis of TSPO ligands to treat neurodegenerative diseases.*  
Supervisors : Dr. Frédéric Bihel and Dr. Martine Schmitt  
[Laboratoire d'Innovation Thérapeutique – UMR7200 – Université de Strasbourg](#)

## Diplomas

- 2012 – 2015** PhD in Organic Chemistry  
*Université de Strasbourg*
- 2014** Doctor of Pharmacy  
*Université de Strasbourg*
- 2011 – 2012** Master 2 « Chemistry and Biology »  
*Université de Strasbourg*
- 2007 – 2011** Pharmaceutical studies  
*Université de Caen*
- 2006** Baccalaureate S, European italian

## Skills

- Chemistry** Organic synthesis, catalysis, heterocycles, SPPS, nucleotide chemistry, Preparative HPLC, Flash chromatography
- Biology** Enzymatic reactions, Cell culture, bioconjugation, FACS, PCR, ELISA, SDS-PAGE
- Chemical Biology** Structure-Activity Relationship (SAR), fluorescent probes, liposomes
- Analytic techniques** HPLC, NMR, IR, LCMS, MS, UV, Fluorescence
- Spoken languages** English : C1, TOEIC 2015 : 975/990  
Italian : B1

## Publications

### 12 - Helvetica Chimica Acta, 2021, e202100211

*"A journey through Hemetsberger-Knittel, Leimgruber-Batcho and Bartoli reactions: access to several hydroxy 5- and 6-azaindoles"*  
S. Radix, **F. Hallé**, Z. Mahiout, A. Teissonnière, G. Bouchez, L. Auberger, R. Barret, & T. Lomberget

### 11 - Journal of Neuroendocrinology, 2020, 32, e12796

*"Mitochondria modulatory effects of new TSPO ligands in a cellular model of tauopathies"*  
A. Grimm, I. Lejri, **F. Hallé**, M. Schmitt, J. Götz, F. Bihel & A. Eckert

### 10 - Acta Scientific Pharmaceutical Sciences, 2019, 3 (12), 33-36

*"New 6-Formyl-oxazolo[3,2-a]Pyrimidine Derivatives: Synthesis and Evaluation as Potential Src Kinase Inhibitors"*  
J. Guillon, **F. Hallé**, S. Savrimoutou, S. Moreau, D. Caignard & P. Sonnet

### 9 - Journal of Alzheimer Disease 2019, 72 (4), 1045–1058

*"TSPO Ligands Boost Mitochondrial Function and Pregnenolone Synthesis"*  
I. Lejri, A. Grimm, **F. Hallé**, M. Abarghaz, C. Klein, M. Maitre, M. Schmitt, J.-J. Bourguignon, A. G. Mensah-Nyagan, F. Bihel & A. Eckert

### 8 - Scientific Reports, 2018, 8 (1), 11384

*"Human erythrocytes release ATP by a novel pathway involving VDAC oligomerization independent of pannexin-1"*  
I. Marginedas-Freixa, C. Lilia Alvarez, M. Moras, M.-F. Leal Denis, C. Hattab, **F. Hallé**, F. Bihel, I. Mouro-Chanteloup, S.-D. Lefevre, C. Le Van Kim, P.-J. Schwarzbaum & M. A. Ostuni

### 7 - Comptes Rendus Chimie, 2018, 21 (11), 987-992

*"Crystal structure and identification of a pyrimido[6,1-b][1,3]oxazin-6-one derivative from the reaction of acrolein with 5-(phenoxyethyl)-2-amino-2-oxazoline"*  
J. Guillon, S. Rubio, S. Savrimoutou, **F. Hallé**, S. Moreau, P. Sonnet & M. Marchiviec

### 6 - Angewandte Chemie International Edition, 2018, 57 (4), 1087–1090

*"Emissive Synthetic Cofactors: Enzymatic Interconversions of <sup>12</sup>A Analogues of ATP, NAD<sup>+</sup>, NADH, NADP<sup>+</sup>, and NADPH"*  
**F. Hallé**, A. Fin, A. R. Rovira & Y. Tor

### 5 - ChemistrySelect, 2017, 2 (22), 6452–6457

*"Discovery of Imidazoquinazolinone Derivatives as TSPO Ligands Modulating Neurosteroidogenesis and Cellular Bioenergetics in Neuroblastoma Cells Expressing Amyloid Precursor Protein"*  
**F. Hallé**, I. Lejri, M. Abarghaz, A. Grimm, C. Klein, M. Maitre, M. Schmitt, J.-J. Bourguignon, A. G. Mensah-Nyagan, A. Eckert & F. Bihel

### 4 - ACS Medicinal Chemistry Letters, 2017, 8 (11), 1177–1182

*" $\chi$ -Space Screening of Dermorphin-Based Tetrapeptides through Use of Constrained Arylazepinone and Quinolinone Scaffolds"*  
O. Van der Poorten, R. Van Den Hauwe, E. Eiselt, C. Betti, K. Guillemyn, N. N. Chung, **F. Hallé**, F. Bihel, P. W. Schiller, D. Tourwé, P. Sarret, L. Gendron & S. Ballet

### 3 - Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease, 2017, 1863 (12), 3016–3027

*"The Translocator Protein Ligand XBD173 Improves Clinical Symptoms and Neuropathological Markers in the SJL/J Mouse Model of Multiple Sclerosis"*  
G. Leva, C. Klein, J. Benyounes, **F. Hallé**, F. Bihel, N. Collongues, J. De Seze, A.-G. Mensah-Nyagan & C. Patte-Mensah

### 2 - Tetrahedron Letters, 2016, 57 (14), 1547–1550

*"Synthesis of 3-Amino-3,4-Dihydro-1H-Quinolin-2-Ones through Regioselective Palladium-Catalyzed Intramolecular Cyclization"*  
**F. Hallé**, O. Van der Poorten, C. Doebelin, M. Niederst, S. Schneider, M. Schmitt, S. Ballet & F. Bihel

### 1 - Scientific Reports, 2016, 6 (1), 33516

*"TSPO Ligands Stimulate ZnPPiX Transport and ROS Accumulation Leading to the Inhibition of P. Falciparum Growth in Human Blood."*  
I. Marginedas-Freixa, C. Hattab, G. Bouyer, **F. Hallé**, A. Chene, S. D. Lefevre, M. Cambot, A. Cueff, M. Schmitt, B. Gamain, J. J. Lacapere, S. Egee, F. Bihel, C. Le Van Kim & M. A. Ostuni

## Communications

4 oral communications (GFPP, JCI, Neurorhine) & 7 poster communications (ACS meeting, RICT, REGIO...)