

Jonathan BISSON

Humans and Natural Products interaction

Development of methods, software and databases for Natural Products research

 [bjonnh.net](https://github.com/bjonnh)  [linkedin.com/in/jonathanbisson](https://www.linkedin.com/in/jonathanbisson)  github.com/bjonnh  orcid.org/0000-0003-1640-9989

My main interest is the study of the interaction between Natural Products and Humans. My main objective is to make sense and make available the ideas, data and materials collected and created by Humans. To that end, I am developing an ontology that allows researchers and data analysts to use a common language to express ideas and concepts. The other aspect of my work is more traditional and consists in the discovery of new antibiotics against Tuberculosis and ESKAPE pathogens using mass-spectrometry and advanced data-analysis.

EDUCATION

2012 2009	PhD Biology-Chemistry Interface, UNIVERSITY OF BORDEAUX, France First class honours, cum laude. <i>Jury:</i> Dr. Françoise Guéritte, Pr. Alain Berthod, Pr. Marcel Hibert, Pr. Philippe Jeandet, Patrice André, Pr. Jean-Michel Mérillon <i>Director:</i> Dr. Pierre Waffo-Téguo CPC NMR MS PYTHON LATEX PHYTOCHEMISTRY
2009 2004	Master's and Postgraduate's Chemistry-Biology-Physics Interface, UNIVERSITY OF BORDEAUX, France Ranked 1st. NMR MS PHYTOCHEMISTRY BIOCHEMISTRY
2004 2003	Associate Degree in industrial electrical engineering, LYCÉE GUSTAVE EIFFEL, Bordeaux, France Honorable mention. AUTOMATISM ELECTRICAL ENGINEERING

RESEARCH EXPERIENCE

Today 2018	Visiting Research Assistant Professor, UNIVERSITY OF ILLINOIS AT CHICAGO, U.S.A. <i>Digital Pharmacognosy</i> , development of computational approaches for Natural Product Research Center for Natural Products Technologies, Institute for Tuberculosis Research Program for Collaborative Research in the Pharmaceutical Sciences Department of Medicinal Chemistry and Pharmacognosy <ul style="list-style-type: none">▶ Data analysis Statistics, Linked data, Data cleaning, ETL▶ Ontology Ontology engineering, BFO, OBO, Robot▶ MS In-silico fragmentation, databases, custom software, maintenance, training▶ NMR Full-Spin analysis, prediction, QM models and calculations▶ Counseling College of Dentistry
2018 2013	Postdoctoral Research Associate, UNIVERSITY OF ILLINOIS AT CHICAGO, U.S.A. <i>Digital Pharmacognosy</i> , development of computational approaches for Natural Product Research Pr. <i>Guido F. Pauli</i> group. Department of Medicinal Chemistry and Pharmacognosy <ul style="list-style-type: none">▶ Data analysis Statistics, Linked data, Data cleaning, ETL▶ Ontology Ontology engineering, BFO, OBO, Robot▶ MS In-silico fragmentation, databases, custom software, maintenance, training▶ NMR Full-Spin analysis, prediction, QM models and calculations▶ CPC/CCC Method development▶ Counseling College of Dentistry, Institute for Tuberculosis Research
2013	Postdoctoral Research Associate, UNIVERSITY OF BORDEAUX, France <i>Phytochemistry</i> Development of purification and analytical strategies applied to oenology. Pr. <i>Philippe Darriet</i> group. USC Œnologie - Institut des Sciences de la Vigne et du Vin, Villenave d'Ornon <ul style="list-style-type: none">▶ CPC Hyphenation with FT-MS, Method development▶ Gustatometry Taste Guided Fractionation for bitter and sweet compounds determination in wine▶ Structural elucidation NMR, HR-MS

- 2012 | **PhD candidate**, UNIVERSITY OF BORDEAUX, France  [Access the dissertation \(French with english abstract\)](#)
 2009 | *Phytochemistry* Methodological developments in Centrifugal Partition Chromatography: Application to stilbenoids
 Pr. Jean-Michel Mérillon group. Groupe d'Étude des Substances Végétales à Activité Biologique - Institut des Sciences de la Vigne et du Vin, Villenave d'Ornon
- ▶ **CPC** Hyphenation with MS (direct) and NMR (SPE-mediated), Development of new solvent systems
 - ▶ **Structural elucidation** NMR, MS
 - ▶ **Software development** Reverse engineering of formats and protocols, automation, databases
 - ▶ **Biological assays** Neuroprotection, Iron Chelation
- 2009 | **Master 2 research training**, CNRS, France
Phytochemistry Isolation of bio-active compounds from a Vietnamese tree.
 Dr. Françoise Guéritte group. Institut de Chimie des Substances Naturelles (CNRS), Gif-sur-Yvette, France. Pôle Substances Naturelles Plantes, Advisor: Vincent Dumontet.
- ▶ **Purification** Open columns, HPLC
 - ▶ **Structure elucidation** NMR, MS
 - ▶ **Biological assays** Anti-tumoral (new target) and AChE inhibition.
- 2008 | **Master 1 research training**, IECB, France
Mass spectrometry Determination of substitution efficiency and regioselectivity on a chemically modified protein using MALDI-TOF, enzymatic cleavage and software development.
 Pr. Jean-Marie Schmitter group. European Institute of Chemistry and Biology (IECB)
- 2007 | **Undergraduate research training**, PROCYTECH, France
Medical devices Development of resorbable polyacrylamide gels for bio-implantation through newly designed reticulation agents. Project management, Feasibility study.

OTHER WORK EXPERIENCE

- Today | **Developer & Data architect**, UNIVERSITY OF ILLINOIS AT CHICAGO, U.S.A.
 2015 | *Digital Pharmacognosy*,  [NAPRALERT](#)
 Department of Medicinal Chemistry and Pharmacognosy
- ▶ **Data alignment** Ontologies, external databases
 - ▶ **Ontology** Ontology engineering, BFO, OBO, Robot
 - ▶ **Software development** Kotlin, Python
 - ▶ **Data warehousing** ETL, PostgreSQL, JENA/Fuseki, SPARQL, HDT
 - ▶ **Architecture** AWS, Ansible, Terraform, Bare-metal server management, LXC/LXD, Libvirt, Docker
- 2008 | **IT & laboratory technician**, BLACKSTONE, France.
 Maintenance and repair of laboratory devices, VPN deployment for inter-site confidential communications
- 2007 | **Laboratory technician**, PROCYTECH, France.
 Technical studies performed on resorbable polyacrylamide gels and injectable medical device formulation

TEACHING EXPERIENCE

Student supervision

- 2012 | **Student supervision**, UNIVERSITY OF BORDEAUX, France
 2009 | *Pharmacognosy*, From the plant to the molecule
- ▶ **1 Postgraduate**
 - ▶ **2 Master** Human Nutrition
 - ▶ **2 Master** Plants biotechnology

Practicals teaching assistant

- 2019 | **Student supervision**, UNIVERSITY OF ILLINOIS AT CHICAGO, U.S.A.
Digital Pharmacognosy Special Projects in Pharmacology PMPR 565
- 2012 | **Student supervision**, UNIVERSITY OF BORDEAUX, France
Pharmacognosy, Extraction and purification of active compounds from plants
64 hours, over 100 pharmacy students (Y2, Y3)

University degree teaching

- 2019 | **Course coordinator, Teaching**, UNIVERSITY OF ILLINOIS AT CHICAGO, U.S.A.
NMR from hardware to data analysis, PMPG 516 Structural Elucidation of Natural Products II (Graduate level)
- 2015 | **Teaching**, UNIVERSITY OF ILLINOIS AT CHICAGO, U.S.A.
NMR from hardware to data analysis, PMPG 516 Structural Elucidation of Natural Products II (Graduate level)
- 2012 | **Teaching**, UNIVERSITY OF BORDEAUX, France
Pharmacognosy/Ethnobotany, Metabolites of industrial interest: from Natural Products to Humans
In-class teaching and flipped classroom

Miscellaneous

- Today | **Teaching**, TOOOL CHICAGO, U.S.A.
2016 | *Lockpicking* Teaching kids and adults lockpicking as a hobby (Hak4kids, BSides and monthly meetings)
- Today | **Trainer**
2005 | *Free software* GNU/Linux, Zotero, Inkscape, LibreOffice, Python

VOLUNTEERING

- 2017 | **Chief Technical Officer**, PUMPING STATION ONE, U.S.A.
Hackerspace, managed the complete I.T. infrastructure of the largest hackerspace in the U.S.A. (volunteer). Pumping Station One is a 501(c)3 whose mission is to foster a collaborative environment wherein people can explore and create intersections between technology, science, art, and culture.
- Today | **Volunteer translator**, TED CONFERENCES, U.S.A.
2011 | **TED** is a nonprofit devoted to spreading ideas, usually in the form of short, powerful talks (18 minutes or less). TED began in 1984 as a conference where Technology, Entertainment and Design converged, and today covers almost all topics — from science to business to global issues
- 2011 | **President**, PHD IN BIOLOGICAL AND MEDICAL SCIENCE ASSOCIATION, U.S.A.
2D2B is the association responsible of the > 100 PhD candidates in Biological and Medical sciences at the University of Bordeaux
- 2013 | **Member**, TROLL, France
2005 | **TROLL** is an association combining contemporary theater and organic food production with an emphasis on the empowerment of the members in the different activities.
Writing, acting, collaborative direction of theater plays. Gardening, organic food production, research distribution
Movie and radio editing

CONFERENCE ORGANIZATION

2016	CCC 2016 , CHICAGO, U.S.A. The world conference on Liquid-Liquid chromatography.
2011	SEP 2011 , TOULOUSE, France International conference of the French Separative Technologies Association (AFSEP)
2012 2010	PhD conference , BORDEAUX, France Doctoral school annual congress.
2011	CJC Summer university , BORDEAUX, France National congress of a PhD candidates union.
2010	AquiDoc forum , BORDEAUX, France Regional congress of PhD candidates.

SKILLS

CHROMATOGRAPHY

Solid	(U)HPLC (analytical, preparative), Open columns, Flash, TLC
Liquid	CPC, CCC, method development solvent systems
Hyphenation	CPC-NMR, CPC-MS, CPC-SPE

COMPUTER SKILLS

Programming	Kotlin(Java) (Java/TornadoFX, JUNIT, Gradle), Python, Javascript, C
Publication	Latex, Markdown, Orgmode, LibreOffice, Microsoft Office
Bibliography	Zotero, ORCID, Bibtex, SciFinder, Scopus
Data	PostgreSQL, SPARQL, JSON, XML, Jena/Fuseki, RDF4J
Web	HTML5, CSS, Django
Infrastructure	Ansible, LXC/LXD, LibVirt, Docker, OpenLDAP (deployment), Apache Directory Studio, Let's encrypt automation
Development OS	IntelliJ Idea, Emacs, PyCharm, Gradle, git GNU/Linux (>15 years experience), BSD, Microsoft Windows, Apple MacOS
Knowledge	XWiki, MediaWiki

SPECTROSCOPY | ANALYTICAL METHODS

NMR	Bruker, Acquisition, Sequence optimization, Full-Spin Analysis, Structure elucidation, LC-NMR, LC-SPE-NMR
MS	Bruker (qTOF, ESI-IT, MALDI), Thermo (Orbitrap Exacte), Acquisition, Method development, Maintenance, Optimization, Repair
Optical	Polarimetry, UV-Visible, IR, CD, VCD
Targets	Antibacterials (TB), AChE inhibition, Iron chelation, Peptide-aggregation

ELECTRONICS | HARDWARE

Microcontrollers	Atmel AVR, Arduino, TI MSP430
Conception	Analogic and numeric, signal analysis, automatism
Reverse	Decompilation, Debug, Protocols, Mechanics

DESIGN | CREATION

3D printing	Design and realization, PLA, PETG, Nylon
Audio	Creation, Adaptation, Editing
Graphic design	2D vector (Inkscape) and bitmap (Gimp), 3D static and animated (Blender), Video editing

LANGUAGES

French	● ● ● ● ●
English	● ● ● ● ○

STRENGTH

- Curious
- Collaborative
- Autonomous

 ARTICLES

- McAlpine, James B., Shao-Nong Chen, Andrei Kutateladze, John B. MacMillan, Giovanni Appendino, Andersson Barison, Mehdi A. Beniddir, Maique W. Biavatti, Stefan Bluml, Asmaa Boufridi, Mark S. Butler, Robert J. Capon, Young H. Choi, David Coppage, Phillip Crews, Michael T. Crimmins, Marie Csete, Pradeep Dewapriya, Joseph M. Egan, Mary J. Garson, Grégory Genta-Jouve, William H. Gerwick, Harald Gross, Mary Kay Harper, Precilia Hermanto, James M. Hook, Luke Hunter, Damien Jeannerat, Nai-Yun Ji, Tyler A. Johnson, David G. I. Kingston, Hiroyuki Koshino, Hsiau-Wei Lee, Guy Lewin, Jie Li, Roger G. Linington, Miaomiao Liu, Kerry L. McPhail, Tadeusz F. Molinski, Bradley S. Moore, Joo-Won Nam, Ram P. Neupane, Matthias Niemitz, Jean-Marc Nuzillard, Nicholas H. Oberlies, Fernanda M. M. Ocampos, Guohui Pan, Ronald J. Quinn, D. Sai Reddy, Jean-Hugues Renault, José Rivera-Chávez, Wolfgang Robien, Carla M. Saunders, Thomas J. Schmidt, Christoph Seger, Ben Shen, Christoph Steinbeck, Hermann Stuppner, Sonja Sturm, Orazio Tagliatalata-Scafati, Dean J. Tantillo, Robert Verpoorte, Bin-Gui Wang, Craig M. Williams, Philip G. Williams, Julien Wist, Jian-Min Yue, Chen Zhang, Zhengren Xu, Charlotte Simmler, David C. Lankin, Jonathan Bisson, and Guido F. Pauli (Jan. 2019). “The Value of Universally Available Raw NMR Data for Transparency, Reproducibility, and Integrity in Natural Product Research”. en. In: *Natural Product Reports* 36.1, pp. 35–107. ISSN: 1460-4752. doi: [10.1039/C7NP00064B](https://doi.org/10.1039/C7NP00064B).
- Allard, Pierre-Marie, Jonathan Bisson, Antonio Azzollini, Guido F Pauli, Geoffrey A Cordell, and Jean-Luc Wolfender (Dec. 2018). “Pharmacognosy in the digital era: shifting to contextualized metabolomics”. In: *Current Opinion in Biotechnology* 54, pp. 57–64. doi: [10.1016/j.copbio.2018.02.010](https://doi.org/10.1016/j.copbio.2018.02.010).
- Nelson, Kathryn M., Jayme L. Dahlin, Jonathan Bisson, James Graham, Guido F. Pauli, and Michael A. Walters (May 2017a). “Curcumin May (Not) Defy Science”. In: *ACS Medicinal Chemistry Letters* 8.5, pp. 467–470. doi: [10.1021/acsmedchemlett.7b00139](https://doi.org/10.1021/acsmedchemlett.7b00139).
- (Jan. 2017b). “The Essential Medicinal Chemistry of Curcumin”. In: *Journal of Medicinal Chemistry* 60.5, pp. 1620–1637. doi: [10.1021/acs.jmedchem.6b00975](https://doi.org/10.1021/acs.jmedchem.6b00975).
- Phansalkar, Rasika S., Charlotte Simmler, Jonathan Bisson, Shao-Nong Chen, David C. Lankin, James B. McAlpine, Matthias Niemitz, and Guido F. Pauli (Jan. 2017). “Evolution of Quantitative Measures in NMR: Quantum Mechanical qHNMR Advances Chemical Standardization of a Red Clover (*Trifolium pratense*) Extract”. In: *Journal of Natural Products*. doi: [10.1021/acs.jnatprod.6b00923](https://doi.org/10.1021/acs.jnatprod.6b00923).
- Bisson, Jonathan, Marion Brunel, Alain Badoc, Grégory DaCosta, Tristan Richard, Jean-Michel Mérillon, and Pierre Waffo-Tégou (Oct. 2016). “Hyphenating Centrifugal Partition Chromatography with Nuclear Magnetic Resonance through Automated Solid Phase Extraction”. In: *Analytical Chemistry* 88.20, pp. 9941–9948. doi: [10.1021/acs.analchem.6b01429](https://doi.org/10.1021/acs.analchem.6b01429).
- Allard, Pierre-Marie, Tiphaine Péresse, Jonathan Bisson, Katia Gindro, Laurence Marcourt, Van Cuong Pham, Fanny Roussi, Marc Litaudon, and Jean-Luc Wolfender (Mar. 2016). “Integration of Molecular Networking and In-Silico MS/MS Fragmentation for Natural Products Dereplication”. In: *Analytical Chemistry* 88.6, pp. 3317–3323. doi: [10.1021/acs.analchem.5b04804](https://doi.org/10.1021/acs.analchem.5b04804).
- Pauli, Guido F., Matthias Niemitz, Jonathan Bisson, Michael W. Lodewyk, Cristian Soldi, Jared T. Shaw, Dean J. Tantillo, Jordy M. Saya, Klaas Vos, Roel A. Kleinnijenhuis, Henk Hiemstra, Shao-Nong Chen, James B. McAlpine, David C. Lankin, and J. Brent Friesen (Feb. 2016). “Toward Structural Correctness: Aquatolide and the Importance of 1D Proton NMR FID Archiving”. In: *The Journal of Organic Chemistry* 81.3, pp. 878–889. doi: [10.1021/acs.joc.5b02456](https://doi.org/10.1021/acs.joc.5b02456).
- Bisson, Jonathan, James B. McAlpine, J. Brent Friesen, Shao-Nong Chen, James Graham, and Guido F. Pauli (2016). “Can Invalid Bioactives Undermine Natural Product-Based Drug Discovery?” In: *Journal of Medicinal Chemistry* 59.5, pp. 1671–1690. doi: [10.1021/acs.jmedchem.5b01009](https://doi.org/10.1021/acs.jmedchem.5b01009).
- Bisson, Jonathan, Charlotte Simmler, Shao-Nong Chen, J. Brent Friesen, David C. Lankin, James B. McAlpine, and Guido F. Pauli (2016). “Dissemination of original NMR data enhances reproducibility and integrity in chemical research”. In: *Nat. Prod. Rep.* 33.9, pp. 1028–1033. doi: [10.1039/c6np00022c](https://doi.org/10.1039/c6np00022c).
- Nam, Joo-Won, Rasika S. Phansalkar, David C. Lankin, Jonathan Bisson, James B. McAlpine, Ariene A. Leme, Cristina M. P. Vidal, Benjamin Ramirez, Matthias Niemitz, Ana K. Bedran-Russo, Shao-Nong Chen, and Guido F. Pauli (Aug. 2015). “Subtle Chemical Shifts Explain the NMR Fingerprints of Oligomeric Proanthocyanidins with High Dentin Biomodification Potency”. In: *The Journal of Organic Chemistry* 80.15, pp. 7495–7507. doi: [10.1021/acs.joc.5b01082](https://doi.org/10.1021/acs.joc.5b01082).
- Leme, Ariene A., Cristina M.P. Vidal, A. B. Silva Sousa, Rasika S. Phansalkar, Joo-Won Nam, Jonathan Bisson, Shao-Nong Chen, Guido F. Pauli, and Ana K. Bedran-Russo (2015). “Bioadhesive properties of enriched proanthocyanidins primers”. In: *Dental Materials* 31, e59–e60. doi: [10.1016/j.dental.2015.08.132](https://doi.org/10.1016/j.dental.2015.08.132).
- Pauli, Guido F., Shao-Nong Chen, David C. Lankin, Jonathan Bisson, Ryan J. Case, Lucas R. Chadwick, Tanja Gödecke, Taichi Inui, Aleksej Kronic, Birgit U. Jaki, James B. McAlpine, Shunyan Mo, José G. Napolitano, Jimmy Orjala, Juuso Lehtivarjo, Samuli-Petrus Korhonen, and Matthias Niemitz (June 2014). “Essential Parameters for Structural Analysis and Dereplication by 1 H NMR Spectroscopy”. In: *J. Nat. Prod.* P. 140604072603006. doi: [10.1021/np5002384](https://doi.org/10.1021/np5002384).
- Vidal, Christina M.P., Ariene A. Leme, Thaiane R. Aguiar, Rasika S. Phansalkar, Joo-Won Nam, Jonathan Bisson, James B. McAlpine, Shao-Nong Chen, Guido F. Pauli, and Ana K. Bedran-Russo (2014). “Mimicking the hierarchical functions of dentin collagen cross-links with plant derived phenols and phenolic acids”. In: *Langmuir* 30.49, pp. 14887–14893. doi: [10.1021/la5034383](https://doi.org/10.1021/la5034383).

- Papastamoulis, Yorgos, Jonathan Bisson, Hamza Tamsamani, Tristan Richard, Axel Marchal, Jean-Michel Mérillon, and Pierre Waffo-Tégou (2014). “New E-miyabenol isomer isolated from grapevine cane using centrifugal partition chromatography guided by mass spectrometry”. In: *Tetrahedron*. DOI: [10.1016/j.tet.2014.08.029](https://doi.org/10.1016/j.tet.2014.08.029).
- Leme, Ariene A., Christina M.P. Vidal, Thaianie R. Aguiar, Ana B.S. Sousa, Rasika S. Phansalkar, Joo-Won Nam, Jonathan Bisson, Shao-Nong Chen, Guido F. Pauli, and Ana K. Bedran-Russo (2014). “Phytochemical profile and dentin bioactivity of non-galloylated proanthocyanidins”. In: *Dental Materials* 30, e161. DOI: [10.1016/j.dental.2014.08.327](https://doi.org/10.1016/j.dental.2014.08.327).
- Buffeteau, Thierry, Dominique Cavagnat, Jonathan Bisson, Axel Marchal, Gilbert D. Kapche, Ilaria Battistini, Grégory DaCosta, Alain Badoc, Jean-Pierre Monti, Jean-Michel Mérillon, and Pierre Waffo-Tégou (2014). “Unambiguous determination of the absolute configuration of dimeric stilbene glucosides from the rhizomes of *Gnetum africanum*”. In: *Journal of Natural Products* 77.8, pp. 1981–1985. DOI: [10.1021/np500427v](https://doi.org/10.1021/np500427v).
- Lambert, Carole, Tristan Richard, Elodie Renouf, Jonathan Bisson, Pierre Waffo-Tégou, Louis Bordenave, Nathalie Ollat, Jean-Michel Mérillon, and Stéphanie Cluzet (Nov. 2013). “Comparative Analyses of Stilbenoids in Canes of Major *Vitis vinifera* L. Cultivars”. In: *Journal of Agricultural and Food Chemistry* 61.47, pp. 11392–11399. DOI: [10.1021/jf403716y](https://doi.org/10.1021/jf403716y).
- Nassra, Merian, Stéphanie Krisa, Yorgos Papastamoulis, Gilbert D. Kapche, Jonathan Bisson, Caroline André, Jan-Pieter Konsman, Jean-Marie Schmitter, Jean-Michel Mérillon, and Pierre Waffo-Tégou (June 2013). “Inhibitory Activity of Plant Stilbenoids against Nitric Oxide Production by Lipopolysaccharide-Activated Microglia”. In: *Planta Med* 79.11, pp. 966–970. DOI: [10.1055/s-0032-1328651](https://doi.org/10.1055/s-0032-1328651).
- Pawlus, Alison D., Emma Cantos-Villar, Tristan Richard, Jonathan Bisson, Pascal Poupard, Yorgos Papastamoulis, Jean-Pierre Monti, Pierre-Louis Teissedre, Pierre Waffo-Tégou, and Jean-Michel Mérillon (May 2013). “Chemical dereplication of wine stilbenoids using high performance liquid chromatography/nuclear magnetic resonance spectroscopy”. In: *Journal of Chromatography A* 1289, pp. 19–26. DOI: [10.1016/j.chroma.2013.03.010](https://doi.org/10.1016/j.chroma.2013.03.010).
- Pawlus, Alison D., Ramla Sahli, Jonathan Bisson, Céline Rivière, Jean-Claude Delaunay, Tristan Richard, Eric Gomès, Louis Bordenave, Pierre Waffo-Tégou, and Jean-Michel Mérillon (Jan. 2013). “Stilbenoid Profiles of Canes from *Vitis* and *Muscadinia* Species”. In: *Journal of Agricultural and Food Chemistry* 61.3, pp. 501–511. DOI: [10.1021/jf303843z](https://doi.org/10.1021/jf303843z).
- Slaghenaufi, Davide, Stéphanie Marchand-Marion, Tristan Richard, Pierre Waffo-Tégou, Jonathan Bisson, Jean-Pierre Monti, Jean-Michel Merillon, and Gilles de Revel (Dec. 2013). “Centrifugal partition chromatography applied to the isolation of oak wood aroma precursors”. In: *Food Chemistry* 141.3, pp. 2238–2245. DOI: [10.1016/j.foodchem.2013.04.069](https://doi.org/10.1016/j.foodchem.2013.04.069).
- Arraki, Kamel, Tristan Richard, Alain Badoc, Éric Pédrot, Jonathan Bisson, Pierre Waffo-Tégou, Ahmed Mahjoub, Jean-Michel Mérillon, and Alain Decendit (2013). “Isolation, characterization and quantification of stilbenes from some *Carex* species”. In: *Records of Natural Products* 7.4, pp. 281–291.
- Lambert, Carole, Jonathan Bisson, Pierre Waffo-Tégou, Yorgos Papastamoulis, Tristan Richard, Marie-France Corio-Costet, Jean-Michel Mérillon, and Stéphanie Cluzet (2012). “Phenolics and their antifungal role in grapevine wood decay: Focus on the Botryosphaeriaceae family”. In: *Journal of Agricultural and Food Chemistry* 60.48, pp. 11859–11868. DOI: [10.1021/jf303290g](https://doi.org/10.1021/jf303290g).
- Bisson, Jonathan, Pascal Poupard, Alison D. Pawlus, Alexandre Pons, Philippe Darriet, Jean-Michel Mérillon, and Pierre Waffo-Tégou (Sept. 2011). “Development of hybrid elution systems for efficient purification of stilbenoids using centrifugal partition chromatography coupled to mass spectrometry”. In: *Journal of Chromatography A* 1218.36, pp. 6079–6084. DOI: [10.1016/j.chroma.2011.03.020](https://doi.org/10.1016/j.chroma.2011.03.020).

TALKS

- Bisson, Jonathan, Charlotte Simmler, and Guido F. Pauli (2017). *Where lies the future of Natural Products research?*
- Bisson, Jonathan, John McMillan, and Guido F. Pauli (2017). *Data Transparency and Sharing in NP Research*.
- Bisson, Jonathan (2013). *Reverse-engineering of equipments and file-formats in academic research*.
- (2012). *Hyphenating Centrifugal Partition Chromatography with Analytical Techniques for Finding Biologically Active Stilbenoids*.
- Bisson, Jonathan, Marion Brunel, Alain Badoc, Antonio Palos-Pinto, Jean-Michel Merillon, and Pierre Waffo-Tégou (July 2012). *Hyphenating countercurrent chromatography with NMR and mass spectrometry. How to enhance the range of the liquid phases*. DOI: [10.1055/s-0032-1320283](https://doi.org/10.1055/s-0032-1320283).
- Bisson, Jonathan (2010a). *Phytochemistry of vine and wine: what can hyphenated techniques bring, CPC-MS and HPLC-NMR*.
- (2010b). *Phytochemistry of vine and wine stilbenoids: Developing Innovating Methods for finding New Compounds*.

POSTERS

- A new dedicated center to connect scientists and advance natural product research* (Mar. 2016). Vol. 82. 01. Thieme Publishing Group. DOI: [10.1055/s-0036-1597010](https://doi.org/10.1055/s-0036-1597010).
- Grape Seed Proanthocyanidins: A Novel Source Of Dental Biomaterials And Unique Phytochemistry* (Mar. 2016). Vol. 82. 05. Thieme Publishing Group. DOI: [10.1055/s-0036-1578686](https://doi.org/10.1055/s-0036-1578686).
- Reviving NAPRALERT and Making It Ready For Improvement and New Challenges In Natural Products Chemistry and Pharmacognosy* (Mar. 2016). Vol. 82. 05. Thieme Publishing Group. DOI: [10.1055/s-0036-1578722](https://doi.org/10.1055/s-0036-1578722).

NAPRALERT, from an historical information silo to a linked resource able to address the new challenges in Natural Products Chemistry and Pharmacognosy. (2016). Vol. ICBO-BioCreative 2016 - Food, Nutrition, Health and Environment for the 9 Billion.

Chemical nano shifts explain the NMR fingerprints of dentin-enhancing oligomeric proanthocyanidins (June 2015). Vol. 81. 11. Thieme Publishing Group. DOI: [10.1055/s-0035-1556538](https://doi.org/10.1055/s-0035-1556538).

Dissemination of original NMR data enhances the reproducibility of natural product research (June 2015). Vol. 81. 11. Thieme Publishing Group. DOI: [10.1055/s-0035-1556552](https://doi.org/10.1055/s-0035-1556552).

K-targeted isolation of C-glycosylflavones from *Vitex agnus-castus* by countercurrent methodology (June 2015). Vol. 81. 11. Thieme Publishing Group. DOI: [10.1055/s-0035-1556277](https://doi.org/10.1055/s-0035-1556277).

Minimizing the problems with PIMPs (June 2015). Vol. 81. 11. Thieme Publishing Group. DOI: [10.1055/s-0035-1556293](https://doi.org/10.1055/s-0035-1556293).

OTHER

Bisson, Jonathan, Pierre Waffo-Téguo, and Jean-Michel Mérillon (2010). *Analytical techniques used in vine and wine research: the stilbenoids case*. Tech. rep. 2, pp. 18–23.

REVIEWER

- ▶ Reviewer (main reviewer for two projects) for a grant in the Department of Defense Congressionally Directed Medical Research Programs
- ▶ Molecules (MDPI)
- ▶ Journal of Antibiotics (Nature)
- ▶ Journal of Natural Products (ACS)
- ▶ Journal of Medicinal Chemistry (ACS)
- ▶ Phytochemistry Letters (Elsevier)
- ▶ Fitoterapia (Elsevier)
- ▶ Journal of the Academy of Nutrition and Dietetics (Elsevier)
- ▶ Marine Drugs (MDPI)
- ▶ Journal of Ethnopharmacology (Elsevier)
- ▶ Phytochemistry Reviews (Springer)
- ▶ Methods and Protocols (MDPI)
- ▶ PLOS ONE (PLS)

PROFESSIONAL MEMBERSHIPS

- 2013-Today | **American Society of Pharmacognosy, ASP, U.S.A.**
- 2008-Today | **French Society of Ethnopharmacology, SFE, France**
- 2015-2018 | **American Association for the Advancement of Science, AAAS, U.S.A.**
- 2013 | **French Association for Pharmacognosy Research and Teaching, AFERP, France**
- 2010-2012 | **French Association for Separative Sciences, AFSEP, France**

PROFESSIONAL TRAININGS

- 2018 | **Moving from Peer to Supervisor, CHICAGO, U.S.A.**
- 2017 | **Conflict of Interest Training for Investigators, CHICAGO, U.S.A.**
- 2017 | **Human and Animal Research Subjects Ethics, CHICAGO, U.S.A.**
- 2017 | **Authorship: deciding Who is and Who isn't, CHICAGO, U.S.A.**
- 2011 | **Ethnopharmacology training, METZ, France**
Anthropology, ethnobotany, work strategies and methods, phytotherapy and shamanism studies
- 2012 | **Professional trainings, UNIVERSITY OF BORDEAUX, France**
- 2009 | **Speaking in english, Communicating and writing Science, Interpersonal and social communication, History of Science**