Name: Olivier Boutaud

Date of Birth: December 24th 1966

Home Address: 4505 Idaho Avenue, Nashville, TN 37209
Home Phone Number; 615-579-0475
Marital Status, Spouse's Name: Married, Nathalie Schnetz-Boutaud
Children: 2 children
Military Service: 1988-1989

Education:

- **College:**
  - BS. Major in biochemistry. Université Louis Pasteur, Strasbourg, France, 1990
- **Professional or graduate:**
  - Ph.D. in Molecular and Cellular Pharmacology (magna cum laude). Université Louis Pasteur, Strasbourg, France, 1994
- **Postgraduate Training:**
  - 1994-96: Postdoctoral fellowship in the laboratory of F. P. Guengerich, Department of Biochemistry, Vanderbilt University, Nashville, TN
  - 1996-97: Postdoctoral fellowship in the laboratory of A. R. Brash, Division of Clinical Pharmacology, Vanderbilt University, Nashville, TN
  - 1997-98: Research Fellow in the laboratory of J. A. Oates, Division of Clinical Pharmacology, Vanderbilt University, Nashville, TN

Academic Appointments:

1998-2001: Research Instructor, Division of Clinical Pharmacology, Vanderbilt University, Nashville, TN

2001-2008: Research Assistant Professor, Division of Clinical Pharmacology, Vanderbilt University, Nashville, TN

2008-present: Research Associate Professor, Division of Clinical Pharmacology, Vanderbilt University, Nashville, TN

2016-2019: Adjunct Professor of French, Belmont University, Nashville, TN

Professional Activities:

Research Program:

ONGOING.

Ono Pharmaceutical Contract

Major Goals: The research program between VU and Ono is aimed to obtain Tool Compound for K2P (two-pore domain potassium) channels for future drug discovery efforts. The goal is to obtain Tool Compound which selectively modulate each K2P channel *in vivo* as well as *in vitro*.

Project Number: **UNIV58578**

Name of PD/PI: Craig Lindsley

*Source of Support: Ono Pharmaceutical Co, LTD

*Primary Place of Performance: Vanderbilt University

Project/Proposal Start and End Date: (MM/YYYY) (if available): 11/12/2015-11/10/2023

* Total Award Amount (including Indirect Costs): $13,871,005

* Person Months (Calendar/Academic/Summer) per budget period.

Year	Person Months
2023	3.00 calendar months

Development of $mGlu_7$ receptor allosteric modulators for neurological and psychiatric disorders

Major Goals: The goals of this project are to optimize $mGlu_7$ PAMs suitable for preclinical and investigational new drug (IND)-enabling studies, to test the hypothesis that $mGlu_7$ PAM efficacy and safety is retained across models of RTT clinical point mutations, and to develop a translatable EEG biomarker to support clinical testing of an $mGlu_7$ PAM.

Project Number: **5R01MH124671-03**

Name of PD/PI: Colleen Niswender/Craig Lindsley

*Source of Support: NIH

*Primary Place of Performance: Vanderbilt University

Project/Proposal Start and End Date: (MM/YYYY) (if available): 09/21/2020-06/30/2025

* Total Award Amount (including Indirect Costs): $3,529,256

* Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
2023	0.36 calendar months
2024	0.36 calendar months
2025	0.36 calendar months

Novel mGlu5 negative allosteric modulators as first-in-class non-addictive analgesic therapeutics

Major Goals: We have recently developed a new series of $mGlu_5$ NAMs, highlighted by VU6024945 as the lead, that improve upon the limitations in pharmacokinetics and safety exhibited by other compounds. In this project we propose lead optimization of this series to identify a lead preclinical candidate (PCC) for the development of a novel class of non-addictive analgesic medications.

Project Number: **4UH3NS116218-02**

Name of PD/PI:Jerri Rook/P Jeffrey Conn/Craig Lindsley/Robert Gereau

*Source of Support: NIH/NINDS

*Primary Place of Performance: Vanderbilt University

Project/Proposal Start and End Date: (MM/YYYY) (if available): 09/30/2019-08/31/2024

* Total Award Amount (including Indirect Costs): $2,159,259

* Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
2023	0.60 calendar months
2024	0.60 calendar months

PAST.

*Title: ***Development of M4 PAM Back-up Program***

Major Goals: The collaboration to develop M_4 PAM back-up compounds to achieve Neumora PC designation, structurally distinct from ‘8055 and ‘3205, for clinical development will involve medicinal chemistry, drug metabolism, molecular pharmacology and *in vivo* efficacy studies run at both the WCNDD and CROs.

Project Number: **SRA00000038**

Name of PD/PI: Craig Lindsley

*Source of Support: Neumora.

*Primary Place of Performance: Vanderbilt University

Project/Proposal Start and End Date: (MM/YYYY) (if available):02/10/2022-06/30/2023

* Total Award Amount (including Indirect Costs): $2,867,000

* Person Months (Calendar/Academic/Summer) per budget period.

Year (YYYY)	Person Months (##.##)
2023	4.80

5R44AG055184-02(Rathmacher/Boutaud) 09/30/2016-04/30/2020 2.40 calendar months

NIH/NIA/Metabolic Tech. $527,317 (subcontract only) (NCE)

2-Hydroxybenzylamine for the prevention of Alzheimer's disease: Initial evaluation in humans

We also propose to establish brain penetrance of 2-HOBA and to determine whether it reduces blood and CSF markers of oxidative modification of proteins.

5R01HL131977-03/UNIV58606 (Beckman/Boutaud) 09/07/2016-05/31/2019 1.20 calendar months

NIH/NHLBI/VUMC $11,937 (subcontract only)

The Impact of Diabetes on Revascularization in BEST-CLI

Dr. Boutaud will be planning and supervising experiments, data analysis, and publication of the findings in collaboration with Dr. Beckman. He also will have direct responsibility for maintaining quality control for mass spectrometric and platelet biomarkers analyses utilized in the project.

18SFRN34230125/UNIV60435 (Roden) 07/01/2018-06/30/2019 0.24 calendar months

AHA/VUMC $2,426 (subcontract only)

Reactive lipid metabolites as mediators of AF susceptibility in clinical and genetic risk models

Dr. Boutaud is investigating the molecular mechanisms by which reactive lipid metabolites contribute to pathologies associated with aging, such as Alzheimer's disease. Specifically, he is studying the mechanisms by which isolevuglandins lead to oligomer formation and the central nervous system pathology observed in this form of dementia.

2R01GM076592-10 (Schneider) 08/15/2018-04/30/2022 0.60 calendar months

NIGMS $213,897

Convergence of the Cox-2 and 5-Lipoxygenase Pathways

We propose to study new lipid mediators that are formed in the body in response to injury or infection. We want to determine how they change the body's response to infection, specifically, how they change the immune response and influence the clotting of platelets in the blood. Our results may help better understand the effects of common over-the-counter medications like aspirin and Tylenol that inhibit the formation of the novel lipid mediators.

W81XWH-18-1-0301 UNIV60572 (Wilson) 09/01/2018-08/31/2020 1.44 calendar months

CDMRP/VUMC $14,383

Novel Intervention for Helicobacter pylori-Induced Stomach Cancer: Chemoprevention by Scavengers of Electrophiles

Dr. Boutaud will direct the analyses of levuglandin adducts of histones in the gastric mucosa and the analysis of levels of 5-ethylsalicylamine (EtSA) in blood and gastric tissues. He also will be responsible for managing the database and electronically managed storage of samples for these analytical procedures.

5R01HL133127-03 (Murray/Barnett) 04/01/2017-03/31/2021 0.60 calendar months

NHLBI/VUMC $18,596 (subcontract only)

Novel Pathophysiological Targets in Atrial Fibrillation Susceptibility

Experiments will identify TGFBR3-dependent signaling pathways that regulate metabolic programming, and the mechanisms by which TGFBR3 rescues Bmpr2-deficient PEC function. In this proposal, we will determine whether treating mice with scavengers can inhibit formation of IsoLG adducts in the atrium. We will also determine whether the presence of atrial fibrillation in humans is associated with increased atrial IsoLG adducts, when compared to similar data in patients in sinus rhythm. Successful completion of these studies will validate a novel drug target for atrial fibrillation and demonstrate that scavenging reactive aldehydes in the heart prevents development of atrial fibrillation caused the two major risk factors of hypertension and obesity.

UNIV60646 (Oates) 07/01/2018-06/30/2019 0.60 calendar months

Cumberland Pharmaceuticals Inc. $6,065

Inhibition of Lipid Peroxidation and Cerebral Vasospasm by an Acetaminophen-Based Regimen in Patients with Aneurysmal Subarachnoid Hemorrhage

This pilot study will determine whether APAP, NAC, and APAP in combination with NAC will inhibit lipid peroxidation in aneurysmal subarachnoid hemorrhage. A total of 120 patients will be enrolled with 20 receiving placebo therapy, 20 receiving APAP (4g), 20 receiving NAC, 30 receiving 4g APAP + NAC, and 30 receiving 6g APAP + NAC.

5P01 HL116263-05/ UNIV (Linton/Davies) 06/01/14-04/30/19 0.60 calendar months

NIH/NHLBI/VUMC $341,907 (subcontract only)

HDL Function in Human Disease

High density lipoproteins (HDL) are important in suppressing the development of atherosclerosis but can become dysfunctional under certain conditions where oxidative stress also occurs. Oxidation of lipids can generate reactive compounds, called isolevuglandins, which can react with proteins in HDL and render it dysfunctional. This project will address the hypothesis that overproduction of isolevuglandins is responsible for rendering HDL dysfunctional.

6R21CA187495-03 (Oates) 11/01/2016-03/31/2017

NIH/NCI/VUMC

Prevention of Cox-2 Derived DNA and Histone Modifications in Cancer

These studies will address the mechanism whereby COX-2 contributes to the malignancy and assess new approaches to cancer prevention that derive from an understanding of this mechanism.

14GRNT20460090 (PI: Boutaud) 07/01/2014 – 06/30/2016

American Heart Association

"Characterization of variants in PTGER3 genes as novel markers of cardiovascular risk"

5P50 GM15431-40 (PI: Roberts) 07/03/2011 - 06/30/2016

NIH/NIGMS

"Research Center for Clinical Pharmacology and Drug Toxicology"

Dr Boutaud is co-investigator in projects 1 and 2 that addresses the pharmacology of inhibition of pathologic lipid peroxidation catalyzed by hemeproteins.

1R21 AG042194-01 (Andreasson/Boutaud) 04/01/2012 - 03/31/2014

NIH/NIA

Targeting protein adduction by reactive aldehydes in Alzheimer's disease

Dr. Boutaud is co-PI on this project that investigate whether scavenging reactive aldehydes *in vivo* can prevent the onset or slow down the progression of cognitive impairment in an animal model of Alzheimer's disease.

AL110144 (Andreasson/Boutaud) 09/30/2012 - 09/29/2013

DOD

Targeting Protein Adduction by Reactive Aldehydes in ALS

Dr. Boutaud is site PI for this application that aims at determining whether protein modifications by levuglandins are associated with progression of the disease in the SOD animal model of ALS.

2P50 GM015431-39 (Oates) 07/01/2006 - 06/30/2011

NIH/NIGMS

Research Center for Pharmacology and Drug Toxicology

Dr Boutaud is co-investigator in project 3 that addresses the hypothesis that acetaminophen inhibits hemeprotein-catalyzed lipid peroxidation in human diseases.

1P50 HL081009-01 (Oates) 02/01/2006 - 01/31/2011

NIH/NHLBI

SCCOR in Hemostatic and Thrombotic Disease

Dr Boutaud is co-investigator in project 4 that aims to better understand the mechanism for inter-individual variation in aspirin's pharmacological effect in humans and to evaluate biomarkers for identifying patients with platelets that are resistant to aspirin.

Dr. Boutaud is also Associate Director of the analytical core laboratory for this program.

AFAR (Boutaud) 07/01/2007 - 06/30/2008

American Foundation for Aging Research

Quantification of the relative abundance of secreted APPs as a biomarker of Alzheimer's disease

This project addresses the hypothesis that the abundance of sAPPα relative to sAPPβ could constitute a reliable biomarker for AD.

AHAF (Oates) 08/01/2004 - 07/31/2007

American Health Assistance Foundation

Effect of Cyclooxygenase Activity on Amyloid β

Dr Boutaud is co-investigator in this project that addresses the hypothesis that cyclooxygenases participate in the formation of neurotoxic oligomers of amyloid β in Alzheimer's disease.

1R21 AG026119-01 (Oates) 04/16/2005 - 03/31/2007

NIH/NIA

Lipid-Modification of Proteins in Alzheimer's Disease

Dr. Boutaud is co-investigator in this project that seeks to characterize proteins that are modified by cyclooxygenase-derived lipid adducts in the brain of patients with Alzheimer's disease.

Intramural:

Ph.D. Committee Member for:

- Angela M. Boutté

Defense: Tuesday, 23 August 2005

Title of Dissertation: “Cytoskeletal Protein Dysfunction and Oxidative Modification in Alzheimer’s Disease”.

- Tae-Gyu Nam

Defense: Tuesday, 4 April 2006

Title of Dissertation: "Mono and Bicyclic 6-Aminopyridinols and 2-Aminopyrimidinols as Novel Antioxidants and Prostaglandin H_2 Synthase Inhibitors"

- Yipeng Geng

Defense: Wednesday, 12 March 2014

Title of Dissertation: "The mechanism of exocyte-mediated factor IX activation by factor XIa"

- **Extramural:** *Member of the Editorial Advisory Board:* The Open Neuroscience Journal, Current Neuropharmacology

- ***ad hoc* reviewer in:** American Journal for Hypertension, Biochemical Pharmacology, Brain, British Journal of Pharmacology, Circulation, Chemical Research in Toxicology, Clinical Pharmacology and Therapeutics, Experimental Biology and Medicine, Free Radicals in Biology and Medicine, Journal of Mass Spectrometry, Journal of Pharmacology and Experimental Therapeutics, Journal of the American Heart Association, Medical Science Monitor, Thrombosis and Haemostasis

Publications and Presentations:

1. **Articles in refereed journals (Total of 81):**

Boutaud, O., Dolis, D., & Schuber, F. (1992). Preferential Cyclization of 2,3(S)-22(S),23-Dioxidosqualene by Mammalian 2,3-Oxidosqualene-Lanosterol Cyclase. *Biochem. Biophys. Res. Commun.*, **188**(2), 898-904.

Viola, F., Brusa, P., Balliano, G., Ceruti, M., **Boutaud, O.**, Schuber, F., & Cattel, L. (1995). Inhibition of 2,3-oxidosqualene cyclase and sterol biosynthesis by 10- and 19-azasqualene derivatives. *Biochem. Pharmacol.* **50**(6), 787-796.

Boutaud, O., Ceruti, M., Cattel, L. & Schuber, F. (1995). Retention of the label during the conversion of [3-H-3]squalene into (3S)-2,3-oxidosqualene catalyzed by mammalian squalene oxidase. *Biochem. Biophys. Res. Commun*. **208**(1), 42-47.

Koljak, R., **Boutaud, O.**, Shieh, B-H., Samel, N. & Brash, A. R.(1997). Identification of a Naturally Occurring Peroxidase-Lipoxygenase Fusion Protein. *Science*, **277**, 1994-1996.

Boutaud, O. & Brash, A. R. (1999) Purification and Properties of the two Domains of the Allene Oxide Synthase-Lipoxygenase Fusion Protein of the Coral *Plexaura homomalla. J. Biol. Chem*., **274**, 33764-33770

Boutaud, O., Brame C. J., Salomon R. G., Roberts, L. J. II, and Oates J. A. (1999) Characterization of the lysyl adducts formed from prostaglandin H_2 via the levuglandin pathway. *Biochemistry*, **38**, 9389 -9396.

Benayoud, F., Abouabdellah, A., Richard, C., Bonnet-Delpon, D., Bégué, J.-P, Levasseur, D., **Boutaud, O.** and Schuber, F. (2000) Trifluoromethyl ketones derived from squalene: inhibition of the cholesterol biosynthesis in HepG2 cells. *Tetrahedron Lett.*, **41**, 6367-6370

Abraham, B., Sono, M., **Boutaud, O.**, Shriner, A., Dawson, J. H., Brash, A. R., and Gaffney, B. J. (2001) Characterization of the Coral Allene Oxide Synthase Active Site with UV-Visible Absorption, Magnetic Circular Dichroism, and Electron Paramagnetic Resonance Spectroscopy: Evidence for Tyrosinate Ligation to the Ferric Enzyme Heme Iron *Biochemistry*, **40**, 2251-2259.

Boutaud, O., Brame, C. J., Chaurand, P., Li, J., Rowlinson, S. W., Crews, B. C., Ji, C., Marnett, L. J., Caprioli, R. M., Roberts, L. J. II, and Oates, J. A. (2001) Characterization of the Lysyl-Adducts of Prostaglandin H-Synthases that are Derived from Oxygenation of arachidonic acid *Biochemistry,* **40**, 6948-6955

Bernoud-Hubac, N., Davies, S. S., **Boutaud, O.**, Montine, T.J.and Roberts, L. J., II. (2001) Formation of Highly Reactive γ-ketoaldehydes (Neuroketals) as Products of the Neuroprostane Pathway. *J. Biol. Chem.* **276**, 30964-30970.

Davies, S. S., Amarnath, V., Montine, K. S., Bernoud-Hubac, N., **Boutaud, O.**, Montine, T. J., and Roberts, L. J., II. (2002) Effect of reactive γ-ketoaldehydes Formed by the Isoprostane Pathway (Isoketals) and Cyclooxygenase Pathway (Levuglandins) on Proteasome Function *FASEB J.* **16(7)**, 715-717, Epub Mar 12, 10.1096/fj.01-0696fje

Smith, L. H., **Boutaud, O.**, Breyer, M., Morrow, J.D., Oates, J.A., and Vaughan, D. E. (2002) Cyclooxygenase-2 Dependent Prostacyclin Formation is Regulated by Low Density Lipoprotein Cholesterol *in vitro. Arterioscler. Thromb. Vasc. Biol.* **22**, 983-988.

Boutaud, O., Aronoff, D. M., Richardson, J. H., Marnett, L. J., and Oates J. A. (2002) Determinants of the Cellular Specificity of Acetaminophen as an Inhibitor of Prostaglandin H_2 Synthases *Proc. Natl. Acad. Sci. U. S. A.* **99(10)**, 7130-7135.

Boutaud, O., Ou, J. J., Chaurand, P.,Caprioli, R. M., Montine, T. J., and Oates, J. A. (2002) Prostaglandin H_2 Accelerates Formation of Amyloid $\beta_{1\text{-}42}$ Oligomers *J. Neurochem.* **82**, 1003-1006.

Cox, B., Murphey, L. J., Zackert, W. E., Chinery, R., Graves-Deal, R., **Boutaud, O.**, Oates, J. A., Coffey, R. J., and Morrow, J. D. (2002) Human Colorectal Cancer Cells Efficiently Conjugate the Cyclopentenone Prostaglandin, Prostaglandin J_2, to Glutathione. *Biochim. Biophys. Acta* **1584,** 37-45.

Aronoff, D. M., **Boutaud, O.**, Marnett, L. J., and Oates, J. A. (2003) Inhibition of Prostaglandin H_2 Synthases by Sodium Salicylate is Dependent on the Oxidative State of the Enzyme. *J. Pharmacol. Exp. Ther.* **304(2)**, 589-595.

Kozak, W., Aronoff, D. M., **Boutaud, O.**, and Kozak, A. (2003) 11,12-epoxyeicosatrienoic acid attenuates synthesis of prostaglandin E_2 in rat monocytes stimulated with lipopolysaccharide *Exp. Biol. Med.* **228(7),** 786-794.

Sawaoka, H., Dixon D. A., Oates, J. A., and **Boutaud, O.** (2003) Tristetrapolin binds to the 3‘untranslated region of cyclooxygenase-2 mRNA: a polyadenylation variant in a cancer cell line lacks the binding site. *J. Biol. Chem.* **278(16)**, 13928-13935.

Boutaud, O., Li, J., Zagol I., Shipp, E. A., Davies S. S., Roberts L. J., II, and Oates, J. A. (2003) Levuglandinyl adducts of proteins are formed via a prostaglandin H_2 synthase-dependent pathway after platelet activation *J. Biol. Chem.* **278(19),** 16926-16928.

Brame, C. J., **Boutaud, O.**, Davies, S. S., Yang, T., Oates J. A., Roden, D., and Roberts, L. J. II (2004) Modification of Proteins by Isoketal-Containing Oxidized Phospholipids. *J. Biol. Chem.* **279(14)**, 13447-13451.

Zagol-Ikapitte, I., Bernoud-Hubac, N., Roberts, L. J., II, **Boutaud, O.**, and Oates, J. A. (2004) Characterization of bis-levuglandinyl urea derivatives as products of the reaction between prostaglandin H_2 and arginine. *Biochemistry* **43**, 5503-5510

Zagol-Ikapitte, I., Masterson, T. S., Amarnath, V., Montine, T. J., Andreasson, K. I., Oates, J. A., and **Boutaud, O.** (2005) Prostaglandin H_2-derived Adducts of Proteins Correlate with Alzheimer's Disease Severity. *J. Neurochem.* **94**, 1140-1145.

Boutaud, O., Montine, T. J., Chang, L., Klein, W. L., and Oates, J. A. (2006) PGH_2-derived levuglandin adducts increase the neurotoxicity of amyloid β_{1-42}. *J. Neurochem.* **96**, 917-923.

Davies, S. S., Brantley, E. J., Voziyan, P. A., Amarnath, V., Zagol-Ikapitte, I., **Boutaud, O.**, Belmont, J. M., Hudson, B. G., Oates, J. A., and Roberts, L. J., II. (2006) Pyridoxamine Analogs Scavenge Isoketals and Levuglandins and Protect against H_2O_2-Mediated Cytotoxicity. *Biochemistry* **45(51)**, 15756-15767.

Davies, S. S., Amarnath, V., Brame, C. J., **Boutaud, O.**, and Roberts, L. J., II. (2007). Measurement of Chronic Oxidative Stress by Quantification of Isoketal/Levuglandin γ-ketoaldehyde Protein Adducts Using Liquid Chromatography Tandem Mass Spectrometry. *Nature Protocols* **2(9),** 2079-2091.

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Adler, D. H., Cogan, J. D., Phillips, J. A., III, Schnetz-Boutaud, N., Milne, G. L., Iverson, T., Stein, J. A., Brenner, D. A., Morrow, J. D., **Boutaud, O.**, and Oates, J. A. (2008) Inherited Human Cytosolic Phospholipase $A_{2\alpha}$ Deficiency Associated with Impaired Eicosanoid Biosynthesis, Small Intestinal Ulceration and Platelet Dysfunction. *J. Clin. Invest.* **118(6)**, 2121-2131.

Potet, F., Petersen, C. I., **Boutaud, O.**, Shuai, W., Stepanovic, S. Z., Balser, J. R., and Kupershmidt, S. Genetic Screening in C. Elegans Identifies Rho-GTPAse Activating Protein 6 as Novel HERG Regulator. (2009) *J. Mol. Cell. Cardiol.* **46,** 257-267.

Carrier, E. J., Amarnath, V., Oates, J. A. and **Boutaud, O.** (2009) Characterization of covalent adducts of nucleosides and DNA formed by reaction with levuglandin. *Biochemistry*. **48,** 10775-10781.

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Zagol-Ikapitte, I., Amarnath, V., Bala, M., Roberts, L. J., II, Oates, J. A. and **Boutaud, O.** (2010) Characterization of scavengers of γ-ketoaldehydes that do not inhibit prostaglandin biosynthesis. *Chem. Res. Toxicol.* **23**,240-250.

Mosoni, L., Balage, M., Vazeille, E., Combaret, L., Morand, C., Zagol-Ikapitte, I., **Boutaud, O.**, Marzani, B., Papet, I., and Dardevet, D. (2010) Antioxidant supplementation had positive effects in old rat muscle, but through better oxidative status in other organs. *Nutrition* **26,** 1157-1162.

Boutaud, O., Moore, K. P., Reeder, B. J., Harry, D., Howie, A. J., Wang, S., Kenney-Carney, C. F., Masterson, T. S., Amin, T., Wright, D. W., Wilson, M. T., Oates, J. A. and Roberts, L. J., II. (2010) Acetaminophen inhibits lipid peroxidation catalyzed by the peroxidase activity of hemoproteins and attenuates rhabdomyolysis-induced renal failure. *Proc. Natl. Acad. Sci. U. S. A.* **107(6)**, 2699-2704.

Zagol-Ikapitte, I., Matafonova, E., Amarnath, V., Bodine, C., **Boutaud, O.**, Tirona, R. G., Oates, J. A., Roberts, L. J., II and Davies, S. S. (2010) Determination of the pharmacokinetics and oral bioavailability of salicylamine, a potent γ-ketoaldehyde scavenger, by LC/MS/MS. *Pharmaceutics* **2,** 18-29.

Smith, J. P., Haddad, E. V., Downey, J. D., Breyer, R. M. and **Boutaud, O.** (2010) PGE_2 decreases reactivity of human platelets by activating EP2 and EP4. *Thromb. Res.* **126,** e23-e29.

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Kathleen Reed, K., Tucker, D. E., Aloulou, A., Adler, D., Ghomashchi, F., Gelb, M. H., Leslie, C. C., Oates, J. A. and **Boutaud, O.** (2011) Functional characterization of mutations in inherited human cPLA2 deficiency *Biochemistry* **50**, 1731-1738.

Zagol-Ikapitte, I., Amarnath, V., Oates, J. A. and **Boutaud, O.** (2011) Determination of 3 methoxysalicylamine levels in mouse plasma and tissue by liquid chromatography-tandem mass spectrometry: application to in vivo pharmacokinetics studies. *J. Chromatogr. B.* **879**, 1098-1104.

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3. **Presentations at Scientific Meetings:**

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6th International Symposium on Biological Reactive Intermediates (Paris, July 16th-20th, 2000).

"Activation of Platelets Leads to the Formation of Lysyl-Levuglandin Adducts on Proteins"
7th International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation and Related Diseases (Nashville, October 14th-17th, 2001).

"Tristetrapolin Binds to the COX-2 mRNA 3'-Untranslated Region in Cancer Cells"
12th International Conference on Advances in Prostaglandin, Leukotriene and Other Bioactive Lipid Research (Istanbul, August 25th-29th, 2002).

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8th International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation and Related Diseases (Chicago, September 7th-10th, 2003).

"Inhibition by Acetaminophen of Ferryl-hemoprotein-induced Oxidation of Arachidonic Acid"
9th International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation and Related Diseases (San Francisco, September 11th-14th, 2005).

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10th International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation and Related Diseases (Montréal, September 16th-19th, 2007).

"Formation of thromboxane A_2 and 12-hydroxyeicosatetraenoic acid are differentially regulated by the two receptors for thrombin in human platelets"
11th International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation and Related Diseases (Cancun, October 25th-28th, 2009).

"Acetaminophen and hemeprotein redox-cycling: new tricks for an old drug"
2012 "Oxygen Radicals" Gordon Research Conference, Ventura, CA, February 8th, 2012.

Invited Speaker

"ARE and mRNA stability in carcinogenesis: the example of Prostaglandin H Synthase"
Unité INSERM U727, Université Louis Pasteur (March 24th 2005).

"The levuglandins and Alzheimer's disease"
Department of Neurology and Neurological Sciences, Stanford University (June 13th, 2007).

"Quantification of the relative abundance of secreted APP α and β as a biomarker for Alzheimer's disease", 21st Annual Grantee Conference, AFAR. Santa Barbara, CA, September 7th-9th, 2008.

"COX-2 and colon cancer: from prostaglandins to DNA modifications", INSERM. Strasbourg, France. April 1st, 2009.

"PGE_2 and platelet function: a new paradigm for prevention of thrombosis". Cardeza Seminar, The Thomas Jefferson University, Philadelphia, March 31st, 2010.

"Biomarkers for the early detection of Alzheimer's"
Tennessee Innovation Conference, Vanderbilt-Lowe's Plaza, May 11th, 2010.

"Acetaminophen and hemeprotein redox-cycling: new tricks for an old drug"
Department of Chemistry and Biochemistry Research Seminar Series. The University of South Mississippi, Hattiesburg, MS, January 29th, 2015.

"Platelet Reactivity to Prostaglandin E_2 is a Novel Modifiable Risk Factor for St Elevation Myocardial Infarction"
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