International Union of Toxicology

PROPOSAL TO THE NOMINATING COMMITTEE:
MEMBERS SUITABLE FOR NOMINATION TO THE IUTOX EXECUTIVE COMMITTEE FOR THE PERIOD 2019-2022

Proposal due to Barbara Hales at the IUTOX Secretariat by: **November 19, 2018**
Please include a short CV for the nominee

PROPOSAL SUBMITTED BY

Member Society: Society of Toxicology

Name and signature of IUTOX Member Society representative submitting nomination: Patricia E. Ganey

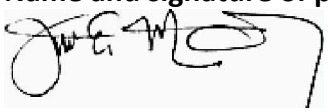
Position: SOT Past President/IUTOX Councilor

Signature: 

Date: October 22, 2018

BIOGRAPHICAL DETAILS OF PROPOSED CANDIDATE

Name and signature of proposed candidate: José Manautou



Nomination for officer or director may be indicated: IUTOX President-Elect

Date of Birth:

Current Position: Interim Department Head of Pharmaceutical Sciences and Professor of Toxicology

Address:

University of Connecticut
Pharmaceutical Sciences
69 N Eagleville Rd
Unit 3092
Storrs, CT 06269-3092

Nationality: USA

Scientific Field:

Education:
University of Connecticut, NIEHS Postdoctoral Fellow in Biochemical Toxicology, 1995; Purdue University, Ph.D., Pharmacology and Toxicology, 1991; University of Puerto Rico, B.S., Pharmacy, 1985.

Professional positions held (with dates):

1992-1994:	Postdoctoral Fellow, University of Connecticut School of Pharmacy
1995-2001:	Assistant Professor of Toxicology, University of Connecticut School of Pharmacy
2001-2010:	Associate Professor of Toxicology, University of Connecticut School of Pharmacy
2010-	Director, University of Connecticut Center for Biochemical Toxicology
2011-	Professor of Toxicology, University of Connecticut School of Pharmacy
2013-	Assistant Dean for Research and Graduate Education, University of Connecticut School of Pharmacy
2016-	Interim Department Head, Pharmaceutical Sciences, University of Connecticut School of Pharmacy

IUTOX positions held (with dates):

Member Society positions held (with dates):

Councilor, 2003–2005; Committee on Diversity Initiatives, ad hoc member, 2009–2011; Council Subcommittee on Contemporary Concepts in Toxicology and Non-SOT Meetings, 2004–2005; Education Subcommittee for Minority Programs, 1998–2000, Council Liaison, 2003–2005; Placement Committee, 1998–2001, Co-Director, 1999–2000, Director, 2000–2001; Services Strategy Committee, 2006–2007; Minority Programs, Coordinator, 2007–present, Assistant Coordinator, 2002–2007; Mechanisms Specialty Section, Councilor, 2001–2003; Specialty Sections, Council Liaison, 2003–2005; NIH Funding Task Force, Council Co-Liaison, 2004–2005; Special Interest Group Task Force, Council Liaison and Chair, 2004–2005; Special Interest Groups Task Force, Chair, 2005–2006; Communications Task Force, 2010–2012; Specialty Sections Governance Group, 2010–2012; Northeast Regional Chapter 2002-present; Hispanic Organization of Toxicologists Special Interest Group 2007–present; Mechanisms Specialty Section, President, 2010–2011, Vice President, 2009–2010, Vice President-Elect, 2008–2009.

Professional memberships and/or awards:

Awards:

2007-2010:	Marlene L. Cohen and Jerome H. Fleisch Scholar
2006:	Achievement Award, Society of Toxicology
2008:	AstraZeneca Traveling Lectureship Award, Society of Toxicology.
2013:	100th Anniversary Celebration of the University of Puerto Rico School of Pharmacy in conjunction with the 33th Annual Research and Education Forum of the University of Puerto Rico Medical Sciences Campus: Keynote Speaker.
2016:	Dean Robert L. McCarthy Faculty Service Award, UConn School of Pharmacy.
2017:	Provost's Outstanding Service Award
2017:	2017 Hispanic Organization for Toxicologists (HOT) Distinguish Toxicologist Award

Professional Memberships:

2003:	Sabbatical Leave, Amsterdam Liver Center, Amsterdam Medical Center, The Netherlands
2005-	Coordinator for Minority Programs, Society of Toxicology
2007-	Fellow, Academy of Toxicological Sciences
1995-	Member, International Society for the Study of Xenobiotics
1988-	Member, Society of Toxicology
1996-	Member, American Pharmaceutical Association
2007-	Member, American Society for Pharmacology and Experimental Therapeutics
2006-	Associate Editor, Toxicology and Applied Pharmacology
2006-	Member, Editorial Board, Toxicological Sciences
2007-	Member, Editorial Board, Toxicology in Vitro
2008-	Member, Editorial Board, Toxicology
2009-	Member, Editorial Board, Drug Metabolism Reviews
2011-2015:	Special Guest Editor, Current Protocols in Toxicology, Drug Transporters Chapter
2010-	NIH College of CSR Reviewers
2010-2015:	NIEHS Board of Scientific Counselor
2006-2009:	Reviewer, NIH XNDA Study Section
2010-2013:	Member, EPA Human Studies Review Board
2014, 2015:	National Research Council Ford Foundation Fellowship Review Panel
2010-	Vice-President of Executive Board, Africa Education Initiative (www.nef3.org).
2013:	Chair, Gordon Research Conference on Cellular and Molecular Mechanisms of Toxicity.
2015-2016:	Member and Chair, ILSI Health and Environmental Health Institute (HESI) Emerging Issues Committee
2015-	National Advisory Environmental Health Sciences Council (NAEHSC); nominated
2015-	Food and Drug Administration's (FDA) Nonprescription Drugs Advisory Committee (NDAC)
2017:	Member, National Academies of Sciences, Engineering and Medicine Committee on the Review of the Health Effects of Nicotine Delivery Systems

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: José E. Manautou

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Professor, Interim Department Head of Pharmaceutical Sciences and Assistant Dean for Research and Graduate Education

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
University of Puerto Rico, San Juan, PR	B.Sc.	05/1985	Pharmacy
Purdue University, West Lafayette, IN	Ph.D.	12/1991	Pharmacology and Toxicology
University of Connecticut, Storrs, CT	Postdoc	12/1994	Toxicology

A. Personal Statement

Research emphasis in my laboratory is on mechanisms of toxicant action and interactions. My long-term research interests are on biochemical and molecular mechanisms of xenobiotic-induced hepatotoxicity and on defining compensatory responses to liver injury that enhances tissue resistance to toxicant re-exposure. My laboratory currently studies the role of multidrug resistance proteins in the hepatobiliary disposition of toxicants. We also study how changes in expression of liver transport proteins contribute to the development of resistance to the action of hepatotoxic chemicals. We are also interested in investigating the biochemical and genetic determinants of the mode of action of chemicals (natural and synthetic) with hepatoprotective properties. I have published a number of seminal articles on these research areas in both toxicology and liver related journals. Illustrative of the quality and relevance of our recent work, one of our articles published in Toxicological Sciences paper entitled *"Coordinated expression of multidrug resistance associated proteins (Mrps) in mouse liver during toxicant–induced injury"* was featured in the journal's Toxicological Highlights section and has been among the 50 most frequently cited articles in this journal in past years. Similarly, other articles from our group have been featured and/or highlighted in other journals such as JPET and J. Hepatology.

1. Aleksunes, L.M., Scheffer, G.L, Jakowski, A., Pruimboom-Brees, I.M., **Manautou, J.E.** (2006). Coordinated expression of multidrug resistance associated proteins (Mrps) in mouse liver during toxicant–induced injury, *Toxicol. Sci.*, 89:370-379. Featured in Toxicological Highlights; *Toxicol. Sci.* 89:341-351.
2. Ghanem, C.I., Rudraiah, S., Bataille, A.M., Goedken, M.J., and Manautou, J.E. (2015). Role of nuclear factor-erythroid 2-related factor 2 (Nrf2) in the transcriptional regulation of brain ABC transporters during acute acetaminophen (APAP) intoxication in mice. *Biochem. Pharmacol.* 94:203–211. PMID:25667042. PMCID: PMC Journal – In Process
3. Flores, K.M., **Manautou, J.E.**, and Renfro, J.L. (2017). Gender-specific expression of ATP-binding cassette (Abc) transporters and cytoprotective genes in mouse choroid plexus. *Toxicology*, 386:84-92. PMCID:PMC Journal – In Process
4. Aladelokun, O., **Manautou, J.E.**, and Wang, L. (2017). The Role of Cyclic Nucleotides in Compensatory Hepatocyte Proliferation. *Curr Drug Metab.*, 18(12):1132-1135. PMCID:PMC Journal – In Process

B. Positions and Honors

Positions and Employment

1992-1994:	Postdoctoral Fellow, University of Connecticut School of Pharmacy
1995-2001:	Assistant Professor of Toxicology, University of Connecticut School of Pharmacy
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2011-	Professor of Toxicology, University of Connecticut School of Pharmacy
2013-	Assistant Dean for Research and Graduate Education, University of Connecticut School of Pharmacy
2016-	Interim Department Head, Pharmaceutical Sciences, University of Connecticut School of Pharmacy

Other Experience and Professional Memberships (partial list)

2003:	Sabbatical Leave, Amsterdam Liver Center, Amsterdam Medical Center, The Netherlands
2003-2005:	Elected Councilor, Society of Toxicology
2005-	Coordinator for Minority Programs, Society of Toxicology
2007-	Fellow, Academy of Toxicological Sciences
1995-	Member, International Society for the Study of Xenobiotics
1988-	Member, Society of Toxicology
1996-	Member, American Pharmaceutical Association
2007-	Member, American Society for Pharmacology and Experimental Therapeutics
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2006-	Member, Editorial Board, Toxicological Sciences
2007-	Member, Editorial Board, Toxicology in Vitro
2008-	Member, Editorial Board, Toxicology
2009-	Member, Editorial Board, Drug Metabolism Reviews
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Honors (partial list)

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2016:	Dean Robert L. McCarthy Faculty Service Award, UConn School of Pharmacy.
2017:	Provost's Outstanding Service Award
2017:	2017 Hispanic Organization for Toxicologists (HOT) Distinguish Toxicologist Award

Partial list of recent invited conference presentations

2013:	ASPET Annual Meeting Symposium: Acetaminophen induced hepatotoxicity: Lessons learned during the last four decades investigating mechanisms of toxicity; Boston, MA.
2013:	Peking University Health Sciences Center, Department of Toxicology School of Public Health; Beijing, China.

2013: Shanghai Jiao Tong University, Shanghai Center for Systems Biomedicine; Shanghai, China.
2013: XIII International Congress of Toxicology; Soul, South Korea.
2013: 40th Annual Society for the Advancement of Chicanos and Native Americans in Sciences (SACNAS) Meeting; San Antonio, TX.
2013: AIC-SAFIS-SAFE Joined Congress, Mar de Plata, Argentina.
2014: Western Africa Society of Toxicology Annual Meeting; University of Lagos, Nigeria.
2014: 40th Annual Summer Meeting of The Toxicology Forum: Aspen, CO.
2014: Tamburro Symposium on Environmental Chemicals and Liver Disease, University of Louisville, KY.
2015: Annual EUROTOX Meeting: "Emerging Science that Crosses Disciplines and Sectors", Porto, Portugal
2015: XIX Congreso Argentino de Toxicología, SIMPOSIO SOT- HOT ADVERSE OUTCOME PATHWAYS (AOP), Buenos Aires, Argentina
2015: ABRCMS Meeting: "How to be Successful in your Summer Experience?", Seattle, WA
2016: 11th International ISSX Meeting, Short Course 3: "Drug Induced Liver Injury – How Mechanistic Insights Aid Preclinical Detection and Prediction", Busan, South Korea, June 12.
2017: XXXVII Congreso Sociedad Española de Farmacologia and guest society: The British Pharmacological Society, Barcelona, Spain, June 19, 2017.
2017: 4to Encuentro Internacional deCiencias Frarmaceuticas y Alimenticias (ECFA 2017) y 1er Simposio Internacional de Toxicologia Ambiental y Regulatoria, Habana, Cuba, July 5, 2017.
2018: Fundan University, Key Laboratory of Smart Drug Delivery: "Relationship Between the Drug Transporter Multidrug-Resistance Associated Protein 4 (MRP4; ABCC4) and: (a). Hepatocellular Proliferation and (b). Non-Alcoholic Fatty Liver Disease", Shanghai, China, May 21, 2018

C. Contribution to Science

1. My laboratory carried out a comprehensive characterization of the expression of multiple uptake and efflux drug transporters in mice following acetaminophen and carbon tetrachloride exposure. My studies have shown that hepatotoxic doses of these chemicals decrease mRNA and protein levels of uptake drug transporters, while increasing the levels of efflux transporters such as the multidrug resistance-associated family of proteins (ABC proteins). Subsequent administration of a second, higher dose of acetaminophen to mice results in lower hepatotoxicity, a phenomenon known as "autoprotection". APAP autoprotection is seen in association with a much more robust induction in Mrp4 expression. From these studies we hypothesized that up-regulation of efflux transporters, particularly Mrp4, is a protective mechanism that minimizes accumulation of potentially toxic chemicals in hepatocytes and may also be a mechanism for enhanced paracrine signaling within the liver during recovery from injury. My group continues to investigate the mechanisms of hepatoprotection by induction in transporter expression. My group has also investigated regulatory factors underlying the changes in transport protein expression induced by hepatotoxicant treatment of mice.

    a. Barnes, S.N. Aleksunes, L.M., Augustine, L.M., Scheffer, G.L., Goedken, M., Pruimboom-Brees, I.M., Jakowski, A.B., Cherrington, N.J., Manautou, J.E. (2007). Induction of Hepatobiliary Efflux Transporters in Acetaminophen-Induced Acute Liver Failure Cases. *Drug Metab. Disp.*, 35:1963-1969.
    b. Aleksunes, L.M., Barnes, S.N., Goedken, M., and Manautou, J.E. (2008). Acquired Resistance to Acetaminophen Hepatotoxicity is Associated with Induction of Multidrug Resistance-Associated Protein 4 (Mrp4) in Proliferating Hepatocytes. Toxicol Sci., 104:261-73. PMCID: PMC2734298
    c. Campion, S.N., Johnson, R, Aleksunes, L.M., Augustine, L.M., Goedken, M., van Rooijen, N, Scheffer, G.L., Cherrington, N.J., Manautou, J.E. (2008) Hepatic Mrp4 induction following acetaminophen is dependent on Kupffer cell function. Am J. Physiol. Gatrointes. Liver Physiol., 295:G294-304. PMCID:PMC2519859

2. My group also studies the mechanistic basis of protection against APAP hepatotoxicity by repeated dosing with the peroxisome proliferators clofibrate. Our previous studies examined changes in selective APAP covalent binding, expression of target proteins, glutathione levels and activity of detoxifying and antioxidant

pathways. More recently, our group employed transcriptomic approaches to identify changes in gene expression that might be mechanistically relevant to the protection afforded by clofibrate. His group identified 53 genes of interest generated by gene array analysis. One of these genes is vanin-1. The protein encoded by this gene is involved in the synthesis of cysteamine, a potent antioxidants known to prevent APAP hepatotoxicity in rodents and humans. This gene is also involved in mediating immune reactivity in response to tissue injury and inflammation. My most recent work characterizes the hepatic function of this gene and its role as a genetic determinant of APAP hepatotoxicity (manuscripts in preparation).

a. Chen, C., Hennig, G.E., Whiteley, H.E., Corton, J.C., and Manautou, J.E. (2000). Peroxisome proliferator-activated receptor alpha-null mice lack resistance to acetaminophen hepatotoxicity following clofibrate exposure. Toxicol. Sci. 57, 338-344. Featured in Toxicological Highlight Toxicol. Sci. 57:187-90.
b. Moffit, J.S., Koza-Taylor, P.H., Holland, R.D., Thibodeau, M.S., Beger, R.D., Lawton, M.P. and, Manautou, J.E. (2007). Differential gene expression in liver associated with the hepatoprotective effect of peroxisome proliferators, Toxicol. Appl. Pharmacol., 222:169-79.
c. Ferreira, D.W., Goedken, M.J., Rommelaere, S., Chasson, L., Gallard, F., Naquet, P., Manautou, J.E. (2016). Enhanced hepatotoxicity by acetaminophen in vanin-1 knockout mice is associated with deficient proliferative and immune responses. *(BBA)-Molecular Basis of Disease* 1862, 662-669. PMCID: PMC4788548

3. Recent transcriptomic studies in this mouse model of APAP autoprotection has led to the identification and characterization of flavin-containing monooxygenase-3 as a novel genetic determinant of APAP hepatotoxicity.

a. Rudraiah, S., Rohrer, P., Gurevich, I., Goedken, M.J., Rasmussen, T., Hines, R.N., and Manautou, J.E. (2014). Tolerance to Acetaminophen Hepatotoxicity in the Mouse Model of Autoprotection is Associated with Induction of Flavin-containing Monooxygenase-3 (FMO3) in Hepatocyte. Tox. Sci. 141:263-77. PMCID: PMC4271123
b. Rudraiah, S. Moscovitz, J., Campion, S.N., Slitt, A.L., Aleksunes, L.M., and Manautou, J.E. (2014). Differential Fmo3 gene expression in Various Liver Injury Models Involving Oxidative Stress in Mice. Toxicology 325:85–95. PMCID: PMC4428328
c. Rudraiah, S., Gu, X., Hines, R.N. and Manautou, J.E. (2016). Oxidative stress-responsive transcription factor NRF2 is not indispensable for the human hepatic Flavin-containing monooxygenase-3 (FMO3) gene expression in HepG2 cells *Toxicol. In Vitro* 31, 54-9. PMCID: PMC4695222

Complete List of Published Work in MyBibiolgraphy
http://www.ncbi.nlm.nih.gov/sites/myncbi/jose.manautou.1/bibliography/43978564/public/?sort=date&direction=ascending

D. Research Support

Pending

1 R01 NIDDK120052-01 Manautou (PI) 09/01/2018 - 08/31/2023
Drug transporters in the pathogenesis of non-alcoholic fatty liver diseases during liver regeneration
Role: PI

Ongoing Research Support

NIEHS R13ES029028 Manautou (PI) 09/15/2017 - 07/31/2020
Society of Toxicology Undergraduate Diversity Program
The goal of this program is to provide an introduction to toxicology by attendance of the SOT Annual Meeting, a special program for undergraduates, and support of mentor relationships.
Role: PI

University of Connecticut Academic Plan Grant Lu (PI) 7/1/2015 - 6/30/2018
Polymer-based Nanocarrier Platform for Improving Efficacy and Safety of Potent Chemotherapeutic Agents
The goal of this project is to develop a modular polymer-based nanocarrier platform for effective delivery of potent chemotherapeutic agents.
Role: Co-investigator

University of Connecticut, ISG ARC Salazar (PI) 10/01/2013 – 09/30/2018
Use of Diversity Outbred Mice to Study Cardiotoxicity of Chemotherapeutic Agents"
The goal of this study is that by using linkage-directed association studies with dense SNP markers in the Diversity outbred mouse panel from Jackson Laboratories to identify DNA sequence variations that may be associated with risk of cardiotoxicity in cancer patients.
Role: Co-investigator

NIEHS 1 R13ES027760-01 Manautou (PI) 02/01/2017 – 01/31/2018
Society of Toxicology Undergraduate Diversity Program
The goal of this program is to provide an introduction to toxicology by attendance of the SOT Annual Meeting, a special program for undergraduates, and support of mentor relationships.
Role: PI

Completed Research Support:

NIH 1 R13 ES026503-01 Manautou (PI) 12/01/2015 – 11/30/2016
Undergraduate Program for Diversity in Toxicology
The goal of this program is to provide an introduction to toxicology by attendance of the SOT Annual Meeting, a special program for undergraduates, and support of mentor relationships.
Role: PI

USDA-NIFA-AFRI Bruno (PI) 10/15/2013 – 10/14/2015
Transcriptional Regulation of Hepatic Inflammation by Green Tea Extract in Rodent Models of Oxidative Stress
The goal of this project is to investigate the role of the transcription factor Nrf2 in the regulation of protective genes that mediate the beneficial effects of green tea extract in preventing fatty acid liver disease
Role: Co-investigator

NIH 1 R13 GM-113558-01 10/09/2014 – 31/08/2015
Undergraduate Program for Diversity in Toxicology
Role: PI
The goal of this program is to increase awareness of undergraduate students majoring in science and science advisors at undergraduate institutions about career choices and graduate studies opportunities in toxicology.

NIH 1 R13 GM-108246-01 04/03/2014 – 28/02/2015
Minority Program for Society of Toxicology
Role: PI
The goal of this program is to increase awareness of undergraduate students majoring in science and science advisors at undergraduate institutions about career choices and graduate studies opportunities in toxicology.

NIH 2 R01 DK069557-09 07/01/2010 – 06/30/2014
Transporter Expression in Response to Hepatotoxicants
Role: PI
The goal of project was investigate the hepatoprotective role of MRP4 and the molecular mechanism of regulation of mouse and human MRP4 genes and the interplay between candidate transcription factors in regulating MRP4 gene expression under chemical-induced oxidative stress.