



MURIEL BOWSER MAYOR

MAY - 7 0

The Honorable Phil Mendelson, Chairman Council of the District of Columbia John A. Wilson Building 1350 Pennsylvania Avenue, NW, Suite 504 Washington, DC 20004

Dear Chairman Mendelson:

In accordance with section 2 of the Confirmation Act of 1978, effective March 3, 1979 (D.C. Law 2-142; D.C. Official Code § 1-523.01), and pursuant to section 12 of the Department of Forensic Sciences Establishment Act of 2011, effective August 17, 2011 (D.C. Law 19-18; D.C. Official Code § 5-1501.11), I am pleased to nominate the following individual:

Dr. Namandje Bumpus 2937 Fort Baker Drive, SE Washington, DC 20020 (Ward 7)

for reappointment as a scientist with experience in scientific research and methodology, who has been published in peer-reviewed scientific journals, and who is not currently employed by the Department or by a law enforcement laboratory or agency member of the Science Advisory Board, for a term to end April 18, 2022.

Enclosed, you will find biographical information detailing the experience of the abovementioned nominee, along with a proposed resolution to assist the Council during the confirmation process.

I would appreciate the Council's earliest consideration of this nomination for confirmation. Please do not hesitate to contact me, or Steven Walker, Director, Mayor's Office of Talent and Appointments, should the Council require additional information.

Sincerely,

Murlel Bowser

Chairman Phil Mendelson at the request of the Mayor

2022.

IN THE COUNCIL OF THE DISTRICT OF COLUMBIA

A PROPOSED RESOLUTION

Chairman Phil Mendelson, at the request of the Mayor, introduced the following resolution which was referred to the Committee on

To confirm the reappointment of Dr. Namandje Bumpus to the Science Advisory Board.

RESOLVED, BY COUNCIL OF THE DISTRICT OF COLUMBIA. That this resolution may be cited as the "Science Advisory Board Namandje Bumpus Confirmation Resolution of 2019".

Sec. 2. The Council of the District of Columbia confirms the reappointment of:

Dr. Namandje Bumpus 2937 Fort Baker Drive, SE Washington, DC 20020 (Ward 7)

- as a scientist with experience in scientific research and methodology, who has been published in peer-reviewed scientific journals, and who is not currently employed by the Department or by a law enforcement laboratory or agency member of the Science Advisory Board, in accordance
- with section 12 of the Department of Forensic Sciences Establishment Act of 2011, effective
- August 17, 2011 (D.C. Law 19-18; D.C. Official Code § 5-1501.11), for a term to end April 18,
  - Sec. 3. The Council of the District of Columbia shall transmit a copy of this resolution,
  - upon its adoption, to the nominee and to the Office of the Mayor.
    - Sec. 4. This resolution shall take effect immediately.

# Namandjé N. Bumpus, PhD

Dept. of Medicine – Division of Clinical Pharmacology Johns Hopkins University School of Medicine



#### **EDUCATION**

1999 – 2003 Occidental College, Los Angeles, CA; B.A. in biology

2003 – 2008 University of Michigan, Ann Arbor, MI; Ph.D. in pharmacology (mentor: Dr. Paul F. Hollenberg)

## POSTDOCTORAL TRAINING

2008 – 2010 The Scripps Research Institute, La Jolla, CA; Department of Molecular and Experimental Medicine (mentor: Dr. Eric F. Johnson)

#### ACADEMIC APPOINTMENTS

2010 – 2015 Assistant Professor, Department of Medicine – Division of Clinical Pharmacology and Department of Pharmacology & Molecular Sciences Johns Hopkins University School of Medicine

2015 – Associate Professor, Department of Medicine – Division of Clinical Pharmacology and Department of Pharmacology & Molecular Sciences Johns Hopkins University School of Medicine

## ADMINISTRATIVE APPOINTMENTS

2015 -

Associate Dean for Institutional and Student Equity (Joint appointment in the Office of Diversity and Inclusion and the Office for the Vice Dean for Education)

Johns Hopkins University School of Medicine

## SCIENTIFIC ACTIVITIES

### Editorial Activities

2013 – 2016 Editorial Board, Drug Metabolism and Disposition

Reviews articles on a regular basis for: FEBS Letters; Food and Chemical Toxicology; Drug Metabolism and Disposition; International Journal of Nanotechnology; Medicinal Chemistry Communications; PLOS One; Journal of Pharmacology and Experimental Therapeutics; Biochemical Pharmacology; Xenobiotica; Pharmacogenomic; European Journal of Medicinal Chemistry; British Journal of Pharmacology; Journal of Endocrinology.

#### Study Sections/Review Groups

2010 – AXA Research Fund, graduate/postdoctoral fellowship reviewer
 2012 – 2013 Ad hoc member, NIH Xenobiotic and Nutrient Disposition and Action Study Section

2014 – 2020	Regular member, NIH Xenobiotic and Nutrient Disposition and Action Study Section
2014	Ad hoc member, NIDDK R13 conference grant review special emphasis panel
2015	Ad hoc member, NIDDK special emphasis panel reviewing ancillary studies to major ongoing clinical research studies to advance areas of scientific interest within the mission of the NIDDK (R01)
2015 –	Basic Pharmacology Advisory Committee (reviews graduate student fellowships, postdoctoral fellowships and research starter grants for junior faculty), Pharmaceutical Researchers and Manufacturers of America Foundation (PhRMA Foundation)
2015 –	Ad hoc reviewer NSE 2016 HBCU-UP Research Initiation Award

## COMMITTEES AND ADMINISTRATIVE SERVICE

National	
2008	American Society for Pharmacology and Experimental Therapeutics, Public Affairs Committee
2013	American Association of Pharmaceutical Scientists National Biotechnology Conference Abstract Reviewer
2013	American Association of Pharmaceutical Scientists, Drug Discovery and Development Interface Section, Membership Relations Committee
2013	American Association of Pharmaceutical Scientists Annual Meeting Abstract Reviewer
2013 – 2015	American Society for Pharmacology and Experimental Therapeutics, Drug Metabolism Division, Councilor
2014	Symposium Chair at Experimental Biology/ASPET Annual Meeting – "Emerging Integrative Approaches to Predicting Host Response to Antimicrobials"
2015 –	Basic Pharmacology Advisory Committee, Pharmaceutical Researchers and Manufacturers of America Foundation (PhRMA Foundation)
2016 – 2021	American Society for Pharmacology and Experimental Therapeutics, Drug Metabolism Division, Secretary/Treasurer (elect, present, past)

## University of Michigan

2004 – 2005	Vice President, Association of Multicultural Scientists
2005 - 2006	President, Association of Multicultural Scientists

## The Scripps Research Institute

2008 – 2010	Library Advisory Committee
2008 – 2010	Executive Board, Network for Women in Science
2008 2010	Career Development Chair, Society of Fellows

## Johns Hopkins University School of Medicine

2010 – 2012 Department of Medicine's Task Force on Women's Academic Careers in Medicine

2013 – 2015	Summer Internship Program admissions committee
2013 –	Diversity Leadership Council
2014 -	MD/PhD Program/Admissions Committee
2014 –	Junior Faculty Resource Advisory Committee
2014 - 2015	Deputy to the Associate Dean for Graduate Biomedical Education
2015 –	Associate Dean for Institutional and Student Equity
2015	Co-chair, Baltimore City social enhancements task force
2016	Basic Science Investigation Task Force

## **AWARDS AND HONORS**

2000	Andrew Mellon Undergraduate Research Fellowship
2002	Howard Hughes Medical Institute Undergraduate Research Fellowship
2003	NSF-Rackham Merit Fellowship, University of Michigan
2006	PhRMA Foundation Predoctoral Fellowship in Pharmacology/Toxicology
2008	UNCF/Merck Postdoctoral Fellowship
2009	Fletcher Jones Foundation – Training for Future Faculty Postdoctoral Fellowship
2011	PhRMA Foundation Research Starter Grant in Pharmacology/Toxicology
2014	Tanabe Young Investigator Award, American College of Clinical Pharmacology
2015	Drug Metabolism Early Career Achievement award, American Society for Pharmacology and Experimental Therapeutics
2015	Outstanding Alumnus/a Award, University of Michigan School of
	Medicine, Department of Pharmacology
2016	Presidential Early Career Award for Scientists and Engineers (Awarded by President Obama)

## MEMBERSHIPS AND PARTICIPATION IN PROFESSIONAL SOCIEITIES

International Society for the Study of Xenobiotics

American Society for Pharmacology and Experimental Therapeutics,

- Public Affairs Committee, member (2008 2011)
- Councilor, Drug Metabolism Division (2013 2015)
- Symposium Chair at Experimental Biology/ASPET Annual Meeting (2014)
- Drug Metabolism Division, Secretary/Treasurer (2016 2021; elect, present, past)

American Society for Biochemistry and Molecular Biology

American Association of Pharmaceutical Scientists

- National Biotechnology Conference Abstract Reviewer (2013)
- Drug Discovery and Development Interface Section, Membership Relations Committee (2013 2014)
- Annual Meeting Abstract Reviewer (2013, 2014)

## **EXTRAMURAL FUNDING**

Current

## As principal investigator or project leader:

04/01/13 - 01/31/19 Cellular Signaling in Drug-Induced Toxicity

R01 GM103853

NIH

\$1,140,000 total direct costs (current year: \$190,000)

Role: PI, 30% effort

07/01/14 - 06/30/19 Tissue Pharmacology Imaging and Modeling

U19 Al113127 Sub-Project ID: 6596 (Program Project Grant)

NIH

\$2,120,270 project total direct costs (current year: \$427,583)

Role: Project Leader, 20% effort, component project of Development

of Rectal Enema as Microbicide (DREAM; PI, Craig Hendrix)

## As co-investigator:

07/19/13 - 06/30/18 The Effect of Depo-Provera on HIV Susceptibility, Immune Activation and

PrEP PK

R01 Al110371

NIH

Total direct costs to Bumpus: \$225,000 (current year: \$45,000)

Pl. Craig Hendrix

Role: Co-Investigator, performs drug metabolism analyses, 5% effort

01/01/14 - 11/30/20 Laboratory Center: HIV Prevention Trials Network

UM1 Al068613

NIH

Total direct costs to Bumpus: \$800,000 (current year: \$125,000) Pl. Susan Eshleman; Pharmacology Core Pl, Craig Hendrix

Role: Director, drug metabolism and pharmacogenomics. Participates in HIV chemoprevention clinical trial design and performs drug metabolism

analyses for completed studies, 30% effort.

01/01/14 – 11/30/20 Laboratory Center: Microbicide Trials Network

UM1 AI106707

NIH

Total direct costs to Bumpus: \$182,000 (current year: \$26,000) PI, Charlene Dezzutti; Pharmacology Core PI, Craig Hendrix

Role: Co-Investigator. Participates in HIV chemoprevention clinical trial design and performs drug metabolism analyses for completed studies,

5% effort.

04/15/14 - 01/31/19 Eradicating Latent SIV from the CNS by CCR5 Inhibition

R01 NS089482

NIH

Total direct costs to Bumpus: \$68,000 (current year: \$14,000)

PI, Joseph Mankowski

Role: Co-Investigator. Performs mass spec-based analyses for macaque

pharmacokinetics studies, 5% effort.

Previous:

01/01/11 - 12/31/11 Role of NNRTI Metabolites in Hepatotoxicity

Research Starter Grant in Pharmacology/Toxicology

PhRMA Foundation \$60,000 total direct costs Role: PI, 20% effort

12/14/11 - 12/14/12 Reactive Metabolites in Hepatitis C Drug-Induced Hepatotoxicity

Roche

\$60,000 total direct costs Role: PI, 10% effort

01/01/11 - 06/30/13 Center for Novel Therapeutics for HIV-associated Cognitive Disorders

P30 MH075673

NIH

Total direct costs to Bumpus: salary support only

Pl. Justin McArthur

Role: Co-Investigator, 10% effort.

10/01/11 – 12/31/13 Network Laboratory: HIV Prevention Treatment Network

UM1 AI068613

NIH

Total direct costs to Bumpus: \$300,000

PI, Susan Eshleman; Pharmacology Core PI, Craig Hendrix

Role: Director, drug metabolism and pharmacogenomics. Participates in HIV chemoprevention clinical trial design and performs drug metabolism

analyses for completed studies, 5% effort.

01/01/13 – 12/31/13 The Johns Hopkins Center for AIDS Research (JHU CFAR)

P30 Al094189

NIH

Total direct costs to Bumpus: \$50,000 PI, Richard Chaisson and Chris Beyrer

Role: Faculty Development Award recipient, 10% effort.

08/01/12 - 05/31/13 Microbicide Trials Network - Pharmacology Core

UM1 Al968633

NIH

Total direct costs to Bumpus: \$60,000

PI, Craig Hendrix

Role: Co-Investigator, 10% effort.

**TEACHING ACTIVITIES** 

University of Michigan

2005 Nursing Pharmacology, Teaching Assistant

The Scripps Research Institute

2009	Instrumental Analysis, Instructor, University of San Diego
2010	Organic Chemistry II, Instructor, University of San Diego

## Johns Hopkins University School of Medicine

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2011 –	Scientific Foundations of Medicine course, journal club preceptor for medical students, The Johns Hopkins University School of Medicine,
	Baltimore, MD
2012 –	Graduate Pharmacology course, lecturer, "drug metabolism" lectures (2)
	to graduate students, The Johns Hopkins University School of Medicine,
	Baltimore, MD
2012	Mass Spectrometry in an "Omics" World course, lecturer, "metabolomics"
	lecture and "selected reaction monitoring" lecture to graduate students,
2242	The Johns Hopkins University School of Medicine, Baltimore, MD
2013 –	Mechanisms in Bio-Organic Chemistry course, lecturer, "cytochrome
	P450" lecture to graduate students, The Johns Hopkins University School
2013 –	of Medicine, Baltimore, MD Macromolecular Structure and Analysis course, lecturer, "mass
2013 -	spectrometry" lecture to graduate students, The Johns Hopkins University
	School of Medicine, Baltimore, MD
2013 –	Intro to Research Ethics I for graduate students, discussion group leader,
	The Johns Hopkins University School of Medicine, Baltimore, MD
2013 –	Biochemistry, Cellular and Molecular Biology Graduate Program,
	Proposal workshop leader, The Johns Hopkins University School of
	Medicine, Baltimore, MD
2013 –	Scientific Foundations of Medicine course, lecturer, "drug metabolism"
	lectures (2) to medical students, The Johns Hopkins University School of
2013 –	Medicine, Baltimore, MD
2013 -	Scientific Foundations of Medicine course, organizer and preceptor, drug metabolism small group discussion for medical students, The Johns
	Hopkins University School of Medicine, Baltimore, MD
2014 –	Method and Logic course, discussion group leader, Biochemistry, Cellular
	and Molecular Biology Graduate Program, The Johns Hopkins University
	School of Medicine, Baltimore, MD
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#### **MENTORING**

## Advisees, junior faculty

Sandy Hwang Fang, MD, FACS, Assistant Professor, Director, High-Resolution Anoscopy Clinic Ravitch Division, Colon and Rectal Surgery, Department of Surgery, 2016 –

## Advisees, post-doctoral

## Lindsay Avery, PhD, 2012 - 2014

Projects: Anatomic distribution of efavirenz metabolites in human subjects; activation of AMP-activated protein kinase by valproic acid metabolites.

Awards: 1st place in the postdoctoral fellow best abstract competition, ASPET Division of Drug Metabolism at Experimental Biology 2013, Boston, MA Current position: Senior Scientist, Biologics Drug Disposition, Pfizer — Department of Pharmacokinetics, Pharmacodynamics & Metabolism, Cambridge, MA

### Advisees, pre-doctoral

Elizabeth Hersman (PhD in pharmacology completed December 2013)

Thesis title: "Sensitive and Specific Proteomic Identification and Quantitation of Murine Cytochrome P450 Enzymes and Histone Post-Translational Modifications Using Mass Spectrometry"

Current position: Scientist, Mass Spectrometry Division, Thermo Scientific.

Yanhui Lui (PhD in pharmacology completed March 2014)

<u>Thesis title</u>: "Cytochrome P450 3A-mediated Pharmacokinetic Variations for Antiinfective Agents"

Awards: 3<sup>rd</sup> place in the graduate student best abstract competition in the ASPET Division of Drug Metabolism at *Experimental Biology 2012*, San Diego, CA; Bae Gyo Jung Award, Johns Hopkins Young Investigators' Day 2014

<u>Current position:</u> Senior Scientist, Department of Pharmacokinetics, Pharmacodynamics & Metabolism, Merck, Kenilworth, NJ.

Elaine To (PhD in pharmacology completed June 2014)

Thesis title: "Metabolism of Antiretroviral Drugs Used in HIV Pre-Exposure Prophylaxis"

Current position: Senior Scientist, InCube Labs, San Jose, CA

Julie Lade (2013 – ), doctoral candidate in pharmacology

Project: Activation of nuclear receptors by anti-HIV drug metabolites

Awards: 2015 PhRMA Foundation Graduate Fellowship in Pharmacology/Toxicology;

1st place in the graduate student best abstract competition, ASPET Division of Drug Metabolism at Experimental Biology 2015, Boston, MA

1st place in the graduate student best abstract competition, ASPET Division of Drug Metabolism at Experimental Biology 2016, San Diego, CA

Philip Cox (2013 –), doctoral candidate in the Biochemistry, Cellular and Molecular Biology graduate program

<u>Project:</u> Molecular basis for cytochrome P450 2B6 activity towards the anti-HIV drug efavirenz

Awards: 2013 NSF graduate student fellowship

Dominique Figueroa (2014 --), doctoral candidate in pharmacology

<u>Project:</u> Tissue- and cell-specific activation of the nucleotide reverse transcriptase inhibitor tenofovir by nucleotide kinases

Carley Heck (2015 – ), pre-doctoral student in pharmacology

<u>Project:</u> Activation of the IRE1alpha pathway by non-nucleotide reverse transcriptase Inhibitors

Awards: 2016 NSF graduate student fellowship

Advisees, master's degree

Lindsay Yanakakis (MS in biology completed in May 2012)

Thesis title: "In Vitro Metabolism of the Anti-HIV Drug Etravirine"

<u>Current position</u>: Molecular Genetics Technician at Northwestern Reproductive Genetics, Chicago, IL

Jennifer VanAusdall (MS in pharmacology completed in August 2013)

<u>Thesis title:</u> "Activation of Pro-apoptotic Pathways by Efavirenz Metabolites"

<u>Current position:</u> Tenure-track chemistry teacher, Frederick Douglass High School,
Baltimore, MD.

### Advisees, post-baccalaureate

Toussaint Jordan (2011 – 2012). Subsequently earned a MS in chemistry at Farleigh-Dickinson University

<u>Current position:</u> Product Development Chemist and TRI-K Industries, Denville, NJ.

## Advisees, undergraduate

Laura Dankovich (2010), Dept. of Biology, Johns Hopkins University.

Christiana Obeng (2012 – 2013), Dept. of Biology, Johns Hopkins University.

Jennifer Nguyen (2014), Dept. of Biochemistry, Mercer University

Errol Hunte (2015), Dept. of Chemistry, City University of New York - Brooklyn

#### **EXTRAMURAL INVITED PRESENTATIONS**

- 1. "Drug Metabolism by P450 2B6 and the Naturally Occurring K262R Mutant of P450 2B6." Occidental College, Los Angeles, CA. November 2, 2005.
- 2. "Investigation of the Effects of the Naturally Occurring K262R Mutation in P450 2B6 on Active Site Structure and Function." 4<sup>th</sup> Annual Merck Drug Metabolism Graduate Research Symposium. Merck Research Laboratories, West Point, PA. June 19, 2006.
- 3. "Regulation of P450s Involved in Lipid Metabolism." The University of Sydney, Sydney, NSW, Australia. February 23, 2009.
- 4. "Regulation of Cyp4a31 by AMP-activated Protein Kinase and Peroxisome Proliferator Activated Receptor Alpha." *Experimental Biology 2010*. Anaheim, CA. April 26, 2010.
- 5. "Metabolism of Efavirenz by the Cytochromes P450." Merck Research Laboratories, West Point, PA. June 21, 2010.
- 6. "Women in Pharmacology Panel." Experimental Biology 2011. Washington, DC. April 12, 2011.
- 7. "Pharmacologic Mechanisms of Antiretroviral Toxicity." Plenary speaker, 7<sup>th</sup> Annual Course in Clinical Pharmacology, Turin, Italy, January 13, 2012.
- 8. "Biotransformation of Antiretroviral Drugs in Liver Toxicity." Plenary speaker, *Antiviral Pharmacology Workshop*, Barcelona, Spain. November 2, 2012.
- 9. "Pharmacogenomic Determinants For HIV PrEP." Plenary speaker, HIV Prevention Trials Network Annual Meeting. Washington, DC. May 07, 2013.

- "Pharmacological Approaches to HIV Prevention." Keynote Speaker, Department of Pharmacology Annual Retreat, University of Michigan School of Medicine, Ann Arbor, MI. August 28, 2013.
- 11. "Drug-Induced Toxicities During HIV Pre-Exposure Prophylaxis." Michigan State University School of Medicine, Department of Pharmacology & Toxicology, East Lansing, MI. August 29, 2013.
- 12. "Cellular Signaling and Antiretroviral Drug Toxicity." University of Washington School of Pharmacy, Departments of Medicinal Chemistry and Pharmaceutics, Seattle, WA. January 23, 2014.
- 13. "Activation of JNK-BimEL Signaling by Anti-HIV Drug Metabolites." *Great Lakes Drug Metabolism and Disposition Annual Meeting*. Indianapolis, IN. May 15, 2014.
- 14. "New Insights into the Control of Tenofovir Activation." Plenary speaker, *HIV Prevention Trials Network Annual Meeting*. Arlington, VA. June 17, 2014.
- 15. "Impact of CYP3A5 Genotype on Maraviroc Pharmacokinetics." Award Lecture, American College of Clinical Pharmacology Annual Meeting. Atlanta, GA. September 15, 2014.
- 16. "Activation of JNK and BimEL Signaling in Anti-HIV Drug-Induced Toxicity." Emory University School of Medicine, Department of Pharmacology, Atlanta, GA. September 16, 2014.
- 17. "Metabolism and Pharmacogenetic Considerations for the Anti-HIV Drug Maraviroc." Keynote Speaker, Princeton Area American Chemical Society Meeting, Princeton University, Princeton. NJ. December 16. 2014.
- 18. "Impact of Cytochrome P450 Activity on anti-HIV Drug Exposure." University of Maryland School of Pharmacy, Department of Pharmaceutical Science Baltimore, MD. March 4, 2015.
- 19. "Drug Metabolism Considerations in HIV Treatment and Prevention." Award Lecture, Experimental Biology 2015/ASPET Annual Meeting, Boston, MA. March 30, 2015.
- 20. "Newer Pharmacokinetics Techniques in HIV Pre-exposure Prophylaxis Trials." Plenary speaker, *Mucosal Assays Meeting*, Arlington, VA. August 26, 2015.
- "Drug Metabolism in HIV Prevention." Outstanding Alumnus/a Award Lecture, University of Michigan School of Medicine, Department of Pharmacology, Ann Arbor, MI. September 25, 2015.
- 22. "Using Drug Metabolism Insights to Predict Drug Induced Toxicities." Plenary Speaker. New Jersey American Chemical Society Drug Metabolism Discussion Group Symposium, Somerset, NJ. October 15, 2015.
- 23. "Drug-Induced Toxicity Mediated by Drug Metabolites." University of Pittsburgh School of Pharmacy, Department of Pharmaceutical Sciences, Pittsburgh, PA. November 17, 2015.

## PEER-REVIEWED PUBLICATIONS

- Harleton E, Webster M, Bumpus NN, Kent UM, Rae JM and Hollenberg PF. Metabolism of N,N',N"-Triethylenethiophosphoramide by CYP 2B1 and CYP2B6 results in the inactivation of both isoforms by two distinct mechanisms. *Journal of Pharmacology and Experimental Therapeutics*. 2004; 310(3):1011-1019.
- 2. **Bumpus NN**, Sridar C, Kent UM and Hollenberg PF. The Naturally occurring K262R mutant of P450 2B6 exhibits alterations in substrate metabolism and inactivation. *Drug Metabolism and Disposition*. 2005; 33(6):795-802.
- 3. **Bumpus NN**, Kent UM and Hollenberg PF. Metabolism of efavirenz and 8-hydroxyefavirenz by P450 2B6 leads to inactivation by two distinct mechanisms. *Journal of Pharmacology and Experimental Therapeutics*. 2006; 318(1):345-351.
- 4. Hollenberg PF, Kent UM and **Bumpus NN**. Mechanism-based inactivation of human cytochromes p450s: experimental characterization, reactive intermediates, and clinical implications. *Chemical Research in Toxicology*. 2008; 21(1):189-205.
- Bumpus NN and Hollenberg PF. Investigation of the mechanisms underlying the effects of the K262R mutation of P450 2B6 on catalytic activity. *Molecular Pharmacology*. 2008; 74(4):990-9.
- 6. **Bumpus NN** and Hollenberg PF. Cross-linking of cytochrome P450 2B6 to NADPH-cytochrome P450 reductase: identification of a potential site of interaction. *Journal of Inorganic Biochemistry*. 2010; 104(4):485-8.
- Bumpus NN and Johnson EF. 5-Aminoimidazole-4-carboxyamide-ribonucleoside (AICAR)stimulated hepatic expression of Cyp4a10, Cyp4a14, Cyp4a31, and other peroxisome proliferator-activated receptor α-responsive mouse genes is AICAR 5'-monophosphatedependent and AMP-activated protein kinase-independent. *Journal of Pharmacology and Experimental Therapeutics*. 2011: 339(3):886-95.
- 8. **Bumpus NN.** Efavirenz and 8-hydroxyefavirenz induce cell death via a JNK- and BimEL-dependent mechanism in primary human hepatocytes. *Toxicology and Applied Pharmacology*. 2011; 257(2):227-34.
- Yanakakis LJ and Bumpus NN. Biotransformation of the antiretroviral drug etravirine: metabolite identification, reaction phenotyping and characterization of autoinduction of cytochrome P450-dependent metabolism. *Drug Metabolism and Disposition*. 2012; 40(4):803-14.
- 10. Baeten JM, Donnell D, Ndase P, Mugo NR, Campbell JD, Wangisi J, Tappero JW, Bukusi EA, Cohen CR, Katabira E, Ronald A, Tumwesigye E, Were E, Fife KH, Kiarie J, Farquhar C, John-Stewart G, Kakia A, Odoyo J, Mucunguzi A, Nakku-Joloba E, Twesigye R, Ngure K, Apaka C, Tamooh H, Gabona F, Mujugira A, Panteleeff D, Thomas KK, Kidoguchi L, Krows M, Revall J, Morrison S, Haugen H, Emmanuel-Ogier M, Ondrejcek L, Coombs RW, Frenkel L, Hendrix C, Bumpus NN, Bangsberg D, Haberer JE, Stevens WS, Lingappa JR, Celum C. Antiretroviral Prophylaxis for HIV Prevention in Heterosexual Men and Women. New England Journal of Medicine. 2012; 367(5):399-410.

- 11. Lu Y, Hendrix CW and **Bumpus NN**. Cytochrome P450 3A5 Plays a Prominent Role in the Oxidative Metabolism of the Anti-HIV Drug Maraviroc. *Drug Metabolism and Disposition*. 2012; 40(12):2221-30.
- 12. Anton PA, Cranston RD, Kashuba A, Hendrix C, Bumpus NN, Richardson-Harman N, Elliott J, Janocko L, Khanukhova E, Dennis RA, Cumberland WG, Ju C, Carballo-Diéguez A, Mauck C, McGowan IM. RMP-02/MTN-006: A Phase 1 Rectal Safety, Acceptability, Pharmacokinetic and Pharmacodynamic Study of Tenofovir 1% Gel Compared to Oral Tenofovir Disoproxil Fumerate. AIDS Research and Human Retroviruses. 2012; 28(11):1412-21.
- Tovar-Y-Romo LB, Bumpus NN, Pomerantz D, Avery LB, Sacktor N, McArthur JC, Haughey NJ. Dendritic spine injury induced by the 8-hydroxy metabolite of Efavirenz. Journal of Pharmacology and Experimental Therapeutics. 2012; 343(3):696-703.
- Avery LB, VanAusdall JL, Hendrix CW, and Bumpus NN. Compartmentalization and Antiviral Effect of Efavirenz Metabolites in Blood Plasma, Seminal Plasma and Cerebrospinal Fluid. Drug Metabolism and Disposition. 2012; 41(2):422-9.
- 15. Hendrix C, Chen BA, Guddera V, Hoesley C, Justman J, Nakabiito C, Salata R, Soto-Torres L, Patterson K, Minnis AA, Gandham S, Gomez K, Richardson BA and Bumpus NN. MTN-001: Randomized pharmacokinetic cross-over study comparing tenofovir vaginal gel and oral tablets in vaginal tissue and other compartments. PLoS One. 2013; 8(1):e55013.
- 16. Fogel JM, Wang L, Parsons TL, Ou SS, Piwowar-Manning E, Chen Y, Mudhune VO, Hosseinipour MC, Kumwenda J, Hakim JG, Chariyalertsak S, Panchia R, Sanne I, Kumarasamy N, Grinsztejn B, Makhema J, Pilotto J, Santos BR, Mayer KH, McCauley M, Gamble T, Bumpus NN, Hendrix CW, Cohen MS, Eshleman SH. Undisclosed antiretroviral drug use in a multi-national clinical trial (HPTN 052). Journal of Infectious Diseases.2013; 208(10):1624-8
- Lade JM, Avery LB, Bumpus NN. Human Biotransformation of the Non-nucleoside Reverse Transcriptase Inhibitor Rilpivirine and a Cross Species Metabolism Comparison. Antimicrobial Agents and Chemotherapy. 2013; 57(10):5067-79.
- 18. To EE, Hendrix CW, **Bumpus NN**. Dissimilarities in the Metabolism of Antiretroviral Drugs used in HIV Pre-exposure Prophylaxis in Colon and Vagina Tissues. *Biochemical Pharmacology*. 2013; 86(7):979-90.
- 19. Avery LB and **Bumpus NN**. Valproic Acid is a Novel Activator of AMP-Activated Protein Kinase and Decreases Liver Mass, Hepatic Fat Accumulation, and Serum Glucose in Obese Mice. *Molecular Pharmacology*. 2014; 85(1):1-10.
- 20. Spivak AM, Andrade A, Eisele E, Hoh R, Bacchetti P, Bumpus NN, Emad F, Buckheit R 3rd, McCance-Katz EF, Lai J, Kennedy M, Chander G, Siliciano RF, Siliciano JD, Deeks SG. A Pilot Study Assessing the Safety and Latency Reversing Activity of Disulfiram in HIV-1-Infected Adults on Antiretroviral Therapy. Clinical Infectious Disease. 2014; 58(6):883-90.
- 21. Hersman EM and **Bumpus NN**. A Targeted Proteomics Approach for Profiling Murine Cytochrome P450 Expression. *Journal of Pharmacology and Experimental Therapeutics*. 2014; 349(2):221-8.

- Donnell D, Baeten JM, Bumpus NN, Brantley J, Bangsberg DR, Haberer JE, Mujugira A, Mugo N, Ndase P, Hendrix C and Celum C. HIV Protective Efficacy and Correlates of Tenofovir Blood Concentrations in a Clinical Trial of PrEP for HIV Prevention. *Journal of Acquired Immune Deficiency Syndrome*. 2014; 66(3):340-8.
- 23. Seamon KJ, Hansen EC, Kadina AP, Kashemirov BA, McKenna CE, **Bumpus NN** and Stivers JT. Small Molecule Inhibition of SAMHD1 dNTPase by Tetramer Destabilization. *Journal of the American Chemical Society*. 2014; 136(28):9822-5.
- Lu Y, Fuchs EJ, Hendrix CW and Bumpus NN. Cytochrome P450 3A5 Genotype Impacts Maraviroc Concentrations in Healthy Volunteers. *Drug Metabolism and Disposition*. 2014; 42(11):1796-802.
- 25. Cox P and **Bumpus NN**. Structure-activity studies reveal the oxazinone ring is a determinant of cytochrome P450 2B6 activity towards efavirenz. *ACS Medicinal Chemistry Letters*. 2014; 5(10):1156-1161.
- 26. Yang K-H, Hendrix C, Bumpus N, Elliott J, Tanner K, Mauck C, Cranston R, McGowan I, Richardson-Harman N, Anton PA and Kashuba AD. A Multi-Compartment Single and Multiple Dose Pharmacokinetic Comparison of Rectally Applied Tenofovir 1% Gel and Oral Tenofovir Disoproxil Fumarate. PLOS One. 2014; 9(10):e106196.
- 27. Richardson-Harman N, Hendrix CW, Bumpus NN, Mauck C, Cranston RD, Yang K, Elliott J, Tanner K, McGowan I, Kashuba A and Anton PA. Correlation between Compartmental Tenofovir Concentrations and an Ex Vivo Rectal Biopsy Model of Tissue Infectibility in the RMP-02/MTN-006 Phase 1 Study. PLoS One. 2014; 9(10):e111507.
- Lade JM, To EE, Hendrix CW and Bumpus NN. Discovery of Genetic Variants of the Kinases that Activate Tenofovir in a Compartment-Specific Manner. EBioMedicine. 2015; 2(9):1145–1152.
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#### **PATENTS**

1.	Namandje Bumpus and Lindsay Avery: Compounds & Methods to Decrease Obesity-related Hepatic Fat Accumulation & Serum Glucose; US Patent application no. 14/637,784; filed 03/04/15; pending.
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## Executive Office of the Mayor - Office of Talent and Appointments John A. Wilson Building | 1350 Pennsylvania Avenue, Suite 600 | Washington, DC 20004

# Namandjé N. Bumpus, Ph.D.



Dr. Namandjé N. Bumpus is an associate professor of medicine, pharmacology, and molecular sciences at the Johns Hopkins University School of Medicine in Baltimore, Maryland.

Dr. Bumpus's research combines biochemical, molecular, genetic and pharmacological approaches in efforts to gain a mechanistic understanding of inter-individual differences in HIV drug efficacy and toxicity, with the goal of developing

efficacious drugs for HIV prevention. Dr. Bumpus has authored or co-authored numerous peer-reviewed publications and serves on the editorial board of the journal *Drug Metabolism and Disposition*. She is also a regular member of the NIH Xenobiotic and Nutrient Disposition and Action study section. She has been honored with several prestigious scientific awards including the Tanabe Young Investigator Award from the American College of Clinical Pharmacology, the Drug Metabolism Early Career Award from the American Society for Pharmacology and Experimental Therapeutics, the Leon I. Goldberg Award from the American Society for Clinical Pharmacology and Therapeutics, and the Presidential Early Career Award for Scientists and Engineers awarded by President Obama.

A Ward 7 resident, Dr. Bumpus received a Ph.D. in pharmacology at the University of Michigan-Ann Arbor. She completed a postdoctoral fellowship in biochemistry and molecular medicine at the Scripps Research Institute in La Jolla, California.

## GOVERNMENT OF THE DISTRICT OF COLUMBIA

**Executive Office of Mayor Muriel Bowser** 



Office of the General Counsel to the Mayor

To:

Alana Intrieri, Steve Walker

From:

Betsy Cavendish April 22, 2019

Date: Subject:

Legal sufficiency review of Resolutions nominating Dr. Namandje Bumpus, John

Jones II, Dr. Jeanne Jordan, Danielle O'Neill and Marla Carroll to the Science

Advisory Board.

Elijabett A. avendich

This is to Certify that this office has reviewed the above-referenced legislation and found it to be legally unobjectionable. If you have any questions in this regard, please do not hesitate to call me at 202-724-7681.

Elizabeth Cavendish