

CURRICULUM VITAE
WALTON MALCOLM BYRNES
(last modified 6-27-23)

Office Address: Department of Biochemistry and Molecular Biology
Howard University College of Medicine
520 W. Street, NW
Washington, DC 20059
Email: wbyrnes@howard.edu

Website: <https://www.researchgate.net/profile/Walton-Byrnes>
Faculty Profile: <https://profiles.howard.edu/walton-byrnes>

EDUCATION AND TRAINING

1994-96	Postdoctoral Training in Molecular Medicine, Cornell University, Ithaca, NY
1994	Ph.D. in Biochemistry, Louisiana State University, Baton Rouge
1981	B.S. in Chemistry, Xavier University of Louisiana, New Orleans

RESEARCH AND SCHOLARLY INTERESTS

- Kinetics and allosteric regulation of bacterial and archaeal metabolic enzymes, including phosphofructokinase (a glycolytic enzyme) and anthranilate synthase (a chorismate-utilizing tryptophan biosynthetic enzyme)
- The history of biology, particularly the scientific legacy of the early twentieth-century biologist Ernest Everett Just
- Bioethics; climate change and ecological ethics; the science-religion debate

EMPLOYMENT AND RESEACH EXPERIENCE

2008-present	Associate Professor , Department of Biochemistry and Molecular Biology, College of Medicine, Howard University, Washington, DC; member of graduate faculty since 2002
2010 (spring)	Visiting Researcher , Kennedy Institute of Ethics, Georgetown University, Washington, DC
2001-2008	Assistant Professor , Department of Biochemistry and Molecular Biology, Howard University College of Medicine, Washington, DC

- 1999-2001 **Research Scientist**, Biochemical Science Division, Chemical Science and Technology Laboratory, National Institute of Standards and Technology (NIST), Gaithersburg, MD
- 1996-1999 **Assistant Professor**, Chemistry Department, University of Louisiana at Lafayette
- 1994-1996 **Postdoctoral Fellow** in the laboratory of Dr. Robert E. Oswald, Department of Molecular Medicine, College of Veterinary Medicine, Cornell University, Ithaca, NY
- 1988-1994 **Doctoral Candidate** in the laboratory of Dr. Simon H. Chang, Department of Biological Sciences, Louisiana State University, Baton Rouge
- Dissertation Title: *The Structural Basis for Kinetic and Allosteric Differences between Two Bacterial Phosphofructokinases*
- 1984-1988 Chemistry **Instructor** at St. John's College in Belize City, Belize, Central America (1984-1986); Chemistry and Physics **Teacher** at Gonzaga College High School in Washington, DC (1986-1988)
- 1982-1984 **PhD Student** in physical chemistry (1982-1983) and biochemistry (1983-1984), University of Illinois at Champaign-Urbana; **Teaching Assistant** for general chemistry lecture and biochemistry laboratory courses at University of Illinois
- 1980-1982 Undergraduate Summer **Researcher** in Theoretical Biophysical Chemistry at Argonne National Laboratory in Argonne, IL (1980); Analytical and organic chemistry **Laboratory Instructor** at Xavier University of Louisiana in New Orleans (1981-1982)

COURSES TAUGHT (OR TEAM-TAUGHT)

- *Molecules and Cells—Unit 1A*, first-year medical course, 2006-present, fall semesters
- *Biochemistry for the Pharmaceutical Sciences*, first-year pharmacy course, Fall 2013, course coordinator
- *Biomedical Sciences II* (biochemistry integrated with microbiology), first-year pharmacy course, 2004 - 2011, fall semesters; course co-coordinator 2011 - 2012
- *Biochemistry* for PharmD majors, first-year pharmacy course, 2002 – 2004 (fall)
- *Dental Biochemistry*, first-year dental course, 2010 – present (fall); director from 2015 to 2020
- *General Biochemistry*, graduate course, 2004 – present (fall)
- *Biochemistry Laboratory*, graduate course, 2011 – present (fall or spring)
- *Orientation to Research*, graduate course, since fall 2002
- *Principles of Metabolic Regulation*, graduate course, 2002 - present, every other spring semester; coordinator since 2011

- *Enzymology*, graduate course, 2002 – present, every other spring semester; coordinator since 2011
- *Directed Research*, graduate course, since 2002, spring and fall semesters
- *Seminar in Biochemistry*, series and graduate course; coordinator from Fall 2004 to Spring 2006
- Taught general chemistry, chemistry for nursing students, and biochemistry lecture and laboratory courses at the University of Louisiana at Lafayette, 1996 - 1999
- Taught organic and analytical chemistry laboratory courses at Xavier University of Louisiana, 1981 - 1982

RESEARCH GRANTS

1. NIH MBRS-SCORE Grant (SC3 mechanism); Grant PI, W. Malcolm Byrnes; Title: Characterization and Engineering of Fused Chorismate-Utilizing Enzymes; Award Number SC3 GM083752-01. 6/2008 – 5/2013; Total direct costs: \$300,000.
2. Two-year NIH Supplemental Grant. PI, W. Malcolm Byrnes; Title: Administrative Supplement to Existing SC3 Grant (1 SC3 GM 083752 01); Award Number SC3 GM083752-02S1. 10/2009 – 9/2011; Total direct costs: \$122,016
3. NSF Symposium Grant; PI, W. Malcolm Byrnes and Co-PI, Stuart A. Newman of New York Medical College; Title: From Cells to Developmental Systems and Beyond: A Symposium Honoring Ernest Everett Just; Award Number IOS-0830114. 9/2008 – 8/2009; Total direct costs: \$18,000
4. Five-year NIH RCMI Pilot Project grant; PI, W. Malcolm Byrnes, PhD; Title: Structural and Functional Characterization of Aminoglycoside-6-Phosphotransferases; Overall RCMI grant PI Robert Taylor, MD, PhD; Award Number G 12 RR 003048. 6/2003 – 5/2008; Total direct costs: \$362,463
5. Three-year NIH MBRS/SCORE Supplemental Project Grant; PI, W. Malcolm Byrnes, PhD; Title: Characterization of Phenazine Biosynthetic Enzyme PhzE and Its Homolog from *Streptomyces venezuelae*; Overall MBRS/SCORE grant PI, George Littleton, PhD; Award Number S06 GM08016-34. 8/2003 – 6/2006; Total direct costs: \$105,000
6. Two-year Howard University New Faculty Award; PI, W. Malcolm Byrnes, PhD; Title: Cloning, Expression and Characterization of Chorismate-Utilizing Enzymes from *Streptomyces* Involved in Biosynthesis of Bioactive Compounds. 11/2001 – 6/2003; Total direct costs: \$50,000
7. Award from University to Renovate Research Laboratory in Room 4404 Adams Building. Spring 2002 - Spring 2003; Total cost: ~\$45,000

PEER-REVIEWED PUBLICATIONS

*indicates corresponding author(s)

1. **Byrnes WM.** (2020) E. E. Just's Broad, Yet Hidden, Influence on Modern Cell and Developmental Biology. *Molecular Reproduction and Development* 87: 380-391.
2. IN PREPARATION: Ashenafi M, Southerland WM, **Byrnes WM.*** The Monomeric Anthranilate Synthase from *Streptomyces venezuelae*: Tryptophan-168 is Important for Transmission of Allosteric Signal but Not Inhibitor Binding (5-18-17)
3. IN PREPARATION: Ashenafi M and **Byrnes WM.*** The Chorismate Site of Anthranilate Synthase from *Streptomyces venezuelae* (5-18-17)
4. **Byrnes WM.** (2015) E. E. Just and Creativity in Science: The Importance of Diversity. *Journal of African American Studies* 19: 264-278.
5. Ashenafi M, Reddy PT, Parsons JF and **Byrnes WM*** (2015) The Fused Anthranilate Synthase from *Streptomyces venezuelae* Functions as a Monomer. *Molecular and Cellular Biochemistry* 400(1-2): 9-15.
6. **Byrnes WM*** and Newman SA* (2014) Ernest Everett Just: Egg and Embryo as Excitable Systems. *Journal of Experimental Zoology (Molecular and Developmental Evolution)* 322: 191-201.
7. Ashenafi M, Ammosova T, Nekhai S and **Byrnes WM*** (2014) Purification and Characterization of Aminoglycoside Phosphotransferase APH(6)-Id, a Streptomycin Inactivating Enzyme. *Molecular and Cellular Biochemistry* 387: 207-216
8. **Byrnes WM** (2014) Climate Justice, Hurricane Katrina, and African American Environmentalism. *Journal of African American Studies* 18(3): 305-314.
9. Debebe Z, Nekhai S, Ashenafi M, Lovejoy DB, Kalinowski DS, Gordeuk VR, **Byrnes WM**, Richardson DR* and Karla PK* (2012) Development of a sensitive HPLC method to measure in vitro permeability of E- and Z-isomeric forms of thiosemicarbazones in Caco-2 monolayers. *Journal of Chromatography B* 906: 25-32.
10. **Byrnes WM** (2009) Ernest Everett Just, Johannes Holtfreter, and the Origin of Certain Concepts in Embryo Morphogenesis. *Molecular Reproduction and Development* 76(10): 912-921.
11. **Byrnes WM** (2009) Confessions of a 'Pro-Life' Obama Supporter. *The National Catholic Bioethics Quarterly* 9(2): 241-244.
12. Ashenafi M, Carrington R, Collins AC and **Byrnes WM*** (2008) The Fused TrpEG from *Streptomyces venezuelae* is an Anthranilate Synthase, Not a 2-Amino-2-deoxyisochorismate (ADIC) Synthase. *Ethnicity and Disease* 18(2 Suppl 2): 9-13
13. **Byrnes WM** (2008) Direct Reprogramming and Ethics in Stem Cell Research. *The National Catholic Bioethics Quarterly* 8: 277-290.
14. Collins AC, Ashenafi M, Saunders AA and **Byrnes WM*** (2007, first two authors equal) Cloning and Expression of Streptomycin-Inactivating Enzymes APH(6)-Ia and -Id. *Cellular and Molecular Biology* 53: 74-79.
15. Braun G,* Hellwig M, **Byrnes WM** (2007) Global Climate Change and Catholic Responsibility: Facts and Faith Response. *The Journal of Catholic Social Thought* 4(2): 373-401.

16. **Byrnes WM** (2007) The Flawed Scientific Basis of the Altered Nuclear Transfer-Oocyte Assisted Reprogramming (ANT-OAR) Proposal. *Stem Cell Reviews and Reports* 3 :60-65
17. **Byrnes WM** (2007) Partial Trajectory: The Story of the Altered Nuclear Transfer-Oocyte Assisted Reprogramming (ANT-OAR) Proposal. *The Linacre Quarterly* 74(1): 50-59.
18. **Byrnes, WM*** and Eckberg, WR (2006) Ernest Everett Just (1883-1941)—an Early Ecological Developmental Biologist. *Developmental Biology* 296: 1-11.
19. **Byrnes, WM** (2005) Why Human 'Altered Nuclear Transfer' is Unethical: A Holistic Systems View. *The National Catholic Bioethics Quarterly* 5(2): 271-279.
20. Ho DL, **Byrnes WM**, Ma W-P, Shi MY, Callaway DJE and Bu Z* (2004) Structure-Specific DNA-induced Conformational Changes in *Taq* Polymerase Revealed by Small Angle Neutron Scattering. *Journal of Biological Chemistry* 279: 39146-39154.
21. **Byrnes WM*** and Vilker VL (2004) Extrinsic Factors Potassium Chloride and Glycerol Induce Thermostability in Recombinant Anthranilate Synthase from *Archaeoglobus fulgidus*. *Extremophiles* 8: 455-462.
22. **Byrnes WM** (2003) The Ecological Imperative and Its Application to Ethical Issues in Human Genetic Technology. *Ethics in Science and Environmental Politics* 2003: 63-65. Available at: <http://www.int-res.com/articles/esep/2003/E36.pdf>
23. **Byrnes WM** (2003) Epigenetics, Evolution, and Us. *The National Catholic Bioethics Quarterly* 3(3): 489-500.
24. **Byrnes WM** (2001) Human Genetic Technology, Eugenics, and Social Justice. *The National Catholic Bioethics Quarterly* 1(4): 555-581.
25. **Byrnes WM**, Goldberg RN,* Holden MJ, Mayhew MP and Tewari YB (2000) Thermodynamics of Reactions Catalyzed by Anthranilate Synthase. *Biophysical Chemistry* 84: 45-64.
26. Auzat I, **Byrnes M**, Garel J-R and Chang SH* (1995, first two authors equal) Role of Residue 161 in the Allosteric Transitions of Two Bacterial Phosphofructokinases. *Biochemistry* 34: 7062-7068.
27. **Byrnes M**, Hu W, Younathan ES and Chang SH* (1995) A Chimeric Bacterial Phosphofructokinase Exhibits Cooperativity in the Absence of Heterotropic Regulation. *Journal of Biological Chemistry* 270: 3828-3835.
28. Zhu X, **Byrnes M**, Nelson JW and Chang SH* (1995) Role of Glycine 212 in the Allosteric Behavior of Phosphofructokinase from *Bacillus stearothermophilus*. *Biochemistry* 34: 2560-2565.
29. **Byrnes M**, Zhu X, Younathan ES and Chang SH* (1994) Kinetic Characteristics of Phosphofructokinase from *Bacillus stearothermophilus*: MgATP Nonallosterically Inhibits the Enzyme. *Biochemistry* 33: 3424-3431.
30. Li J-Y, Zhu X, **Byrnes M**, Nelson JW and Chang SH* (1993) Site-directed Mutagenesis of Rabbit Muscle Phosphofructokinase cDNA: Mutations at Glutamine 200 Affect the Allosteric Properties of the Enzyme. *Journal of Biological Chemistry* 268: 24599-24606.
31. Li J-Y, Chen Z, Lu L, **Byrnes M** and Chang SH* (1991) Sequence Diversity in the 5'-untranslated Region of Rabbit Muscle Phosphofructokinase mRNA. *Biochemical and Biophysical Research Communications* 170: 1056-1060.

NON-PEER-REVIEWED PUBLICATIONS (book reviews, magazine articles, newspaper articles, online articles, colloquy pieces, letters to the editor, etc.)

1. **Byrnes WM.** (2016) Essay Review: Racial Thought and Racist Thinking: Historical and Contemporary Perspectives. *Journal of African American History* 101 (Winter-Spring issue): 150-163.
2. **Byrnes WM** (2016) Diversity is Critical for Scientific Progress. *ASBMB Today* (February issue): 27-28. See: <https://www.yumpu.com/en/document/read/55238304/special-section> Last accessed 6-27-23
3. **Byrnes WM** (2015). El precursor Olvidad de la Epigenética. *Investigación y Ciencia* Junio (465): 46-49. Available at: https://www.researchgate.net/publication/277404246_El_precursor_olvidad_de_la_epigenetica Last accessed 6-27-23.
4. **Byrnes WM** (2015). The Forgotten Father of Epigenetics. *American Scientist* 103 (March-April issue): 106-109. Available at: <https://www.americanscientist.org/article/the-forgotten-father-of-epigenetics> Last accessed 6-27-23.
5. **Byrnes WM** (2015). A Xavier Chemistry Alumnus Looks Back. [Online]. *Xavier University of Louisiana (XULA) Department of Chemistry website* (April 15); Originally available on the XULA Chemistry Department website. Now available at: https://www.researchgate.net/publication/275021540_A_Xavier_Chemistry_Alumnus_Looks_Back Last accessed 6-27-23.
6. **Byrnes WM** (2015). Dr. Ernest Just's Legacy. In booklet: Reaves, Titus A. (ed.) *Ernest Everett Just, PhD: Outstanding African American Biologist of the 20th Century*. Charleston: Medical University of South Carolina Press, p.13.
7. **Byrnes WM,* Bethea G** (2014) Interview: Highlighting the Legacy of E. E. Just. *Howard University Graduate School Research Magazine* 004 (April). Available at: https://www.researchgate.net/publication/261473949_Interview_Highlighting_the_Legacy_of_Ernest_Everett_Just Last accessed 6-27-23.
8. **Byrnes WM** (2013) The Genius of Ernest Everett Just. *HBCU Speakers' Bureau and Research Magazine*, Issue 1 (2020; reprinted from the Howard University Graduate School Research Magazine, Issue 2, December 2013). Available at: <https://hbcuspbresearch.org/issue1.html> and https://www.researchgate.net/publication/259196977_The_Genius_of_Ernest_Everett_Just Last accessed 6-27-23.
9. **Byrnes WM** (2013) Opinion: A Diverse Perspective. Progress in Science is Dependent on the Diversity of Its Workforce. *The Scientist* (July 29); Available at: <http://www.the-scientist.com/?articles.view/articleNo/36733/title/Opinion--A-Diverse-Perspective/> Last accessed 6-27-23.
10. **Byrnes WM** (edited and translated into Italian by Luigia Santella; 2013) Sulle orme di E. E. Just alla Stazione Zoologica di Napoli: celebrazione di un'amicizia. *Research Italy* website (July 1). Archived at: <https://web.archive.org/web/20140819211109/https://www.researchitaly.it/conoscere/progetti-e-storie-di-successo/interviste-e-testimonianze/sulle-orme-di-e-e-just-alla-stazione-zoologica-di-napoli-celebrazione-di-un-amicizia/> Last accessed 6-27-23
11. **Byrnes WM** (2013) Walking in the Footsteps of Ernest Everett Just at the Stazione Zoologica in Naples: Celebration of a Friendship. *Howard University Newsroom* (June

- 11). No longer available on H.U. website; now available at:
https://www.researchgate.net/publication/258341600_Walking_in_the_Footsteps_of_Ernest_Everett_Just_at_the_Stazione_Zoologica_in_Naples_Celebration_of_a_Friendship
 Last accessed 6-27-23.
12. **Byrnes WM** (2012) Anacostia, Environmental Justice, and a Pipeline Protest. *The Association for Environmental Studies and Sciences (AESS) Newsletter* 4(1): 3-4.
 13. **Byrnes WM** (2012) Review: *African American Environmental Thought: Foundations* by Kimberly K. Smith. *Environmental History* 17(2): 442-443
 14. **Byrnes WM** (2010) Review: *A Moral Climate: The Ethics of Global Warming* by Michael S. Northcott. *The Journal for the Study of Religion, Nature and Culture* 4(4): 500-502.
 15. **Byrnes WM** (2010) A Biomedical Revolution: The Pro-Life Promise of a New Stem Cell Technology. *America: The National Catholic Weekly* (August 16-23 issue): 16-18.
 Available at: <https://www.americamagazine.org/issue/745/article/biomedical-revolution>
 Listen to the associated podcast at:
<https://www.americamagazine.org/media/podcasts/toward-prolife-stem-cell-research>
 Last accessed 6-27-23.
 16. **Byrnes WM** (2010) Ernest Everett Just: Experimental Biologist *Par Excellence*. *ASBMB Today* (February issue): 22-25. Available at: <https://www.asbmb.org/asbmb-today/people/012510/ernest-everett-just> Last accessed 6-27-23.
 17. **Byrnes WM** (2010) Life's Lineages (Review: *New Foundations of Evolution* by Jan Sapp). *American Scientist* 98(1): 81-83. Available at:
<https://www.americanscientist.org/article/lifes-lineages> Last accessed 6-27-23.
 18. **Byrnes WM** (2009) Review: *Only a Theory: Evolution and the Battle for America's Soul* by Kenneth R. Miller. *Theology and Science* 7(4): 427-429.
 19. **Byrnes WM** (2009) Review: *DARWIN'S GIFT to Science and Religion* by Francisco Ayala. *The National Catholic Bioethics Quarterly* 9(4): 605-608.
 20. **Byrnes WM** (2009) Introduction to the Special Issue. *Molecular Reproduction and Development* 76(10): first page.
 21. **Byrnes WM** (2009) Comments on 'Moral Complicity in Induced Pluripotent Stem Cell Research'. *Kennedy Institute of Ethics Journal* 19(2): 202-205
 22. **Byrnes WM** (2008) Review: *The Panda's Black Box: Opening up the Intelligent Design Controversy* by Nathaniel Comfort (editor). *The National Catholic Bioethics Quarterly* 8(2): 385-387.
 23. **Byrnes WM** (2007) Review: *Challenging Nature: The Clash of Science and Spirituality at the New Frontiers of Life* by Lee M. Silver. *Worldviews: Environment, Culture, Religion* 11: 248-253.
 24. Leyser ML,* Finley ML, Lee W, Munasinghe M, **Byrnes WM** and Bender FL (2007) The EcoRes Call for Action: Achieving Global Climate Justice in the 21st Century. *The EcoRes Forum: Exploring the Ethical, Political and Socio-Cultural Aspects of Climate Change*. No longer available online (6-27-23). PDF available at:
https://www.researchgate.net/publication/258341634_The_EcoRes_Call_for_Action_Achieving_Global_Climate_Justice_in_the_21st_Century Last accessed 6-27-23
 25. **Byrnes WM** (2007) Just, Ernest Everett (1883-1941) in *The New Dictionary of Scientific Biography*, Koertge N, Ed. (Farmington Hills, MI: Charles Scribner's Sons/Gale Norton): 48-52. See: https://www.researchgate.net/publication/258341249_Just_Ernest_Everett
 Last accessed 6-27-23

26. **Byrnes WM** (2007) Poem: Remembering Cicadas. *The Ecozoic Reader* 4(4): 84.
27. **Byrnes WM** (2007) Colloquy Letter: ANT-OAR Misrepresents the Scientific Facts. *The National Catholic Bioethics Quarterly* 7(2): 226-227.
28. **Byrnes WM*** and Granados J (2006) ANT-OAR Fails on All Counts: Method of Harvesting Stem Cells Riddled with Scientific and Ethical Flaws. *Science and Theology News* (June 2006): 23-25. See preprint at: <https://philpapers.org/archive/BYRAFO.pdf> Last accessed 6-27-23.
29. **Byrne WM** (2006) Colloquy Letter: Inconsistencies in the Pro-ANT-OAR Position. *The National Catholic Bioethics Quarterly* 6(2): 201-202.
30. **Byrnes WM** (2006) Review: *Deeper Than Darwin: The Prospect for Religion in the Age of Evolution* by John F. Haught. *The National Catholic Bioethics Quarterly* 6(1): 179-182
31. **Byrnes WM** (2005) Colloquy Letter: Holistic Systems and 'Delayed Hominization' Are Incompatible. *The National Catholic Bioethics Quarterly* 5(3): 447-448.
32. **Byrnes WM** (2005) Review: *Beyond Therapy: Biotechnology and the Pursuit of Happiness* by the U.S. President's Council on Bioethics. *The National Catholic Bioethics Quarterly* 5(1): 205-207.
33. GENBANK SUBMISSION: Collins AC and **Byrnes WM*** (13 April 2005) Nucleotide Sequence of the Gene *aph(6)-Ia* from *Streptomyces griseus*. Accession No. AY971801
34. GENBANK SUBMISSION: Ashenafi M, Saunders AA, Sundin GW and **Byrnes WM*** (25 April 2005) Nucleotide Sequence of the Gene *aph(6)-Id* from *Pseudomonas syringae* pv. *syringae*. Accession No. AY997127
35. **Byrnes WM** (2004) Letter to the Editor: Bioethics for the Present and the Future. *The Chronicle of Higher Education* 50(41): B18. Available at: <https://www.chronicle.com/article/bioethics-for-the-present-and-the-future/> Last accessed 6-27-23.
36. **Byrnes WM** (2004) Review: *Enough: Staying Human in an Engineered Age* by Bill McKibben. *The National Catholic Bioethics Quarterly* 4(3): 639-641.
37. **Byrnes WM** (2004) Review: *A Devil's Chaplain* by Richard Dawkins. *The National Catholic Bioethics Quarterly* 4(1): 216-218.
38. **Byrnes WM** (2004) Letter to the Editor: Mail Call: A Research Phobia? *Newsweek International* CXLIII (20): 5.
39. **Byrnes WM** (2003) Colloquy Letter: Holism, Determinism, and the Developing Embryo. *The National Catholic Bioethics Quarterly* 3(4): 664-665.
40. **Byrnes WM** (2003) Review: *Redesigning Humans: Our Inevitable Genetic Future* by Gregory Stock. *The National Catholic Bioethics Quarterly* 3(2): 427-429.
41. **Byrnes WM** (2002). Human Genetic Technology, Eugenics, and Social Justice (abridged version). *Issues in Law and Medicine* 18(1): 88-102.
42. **Byrnes WM** (2002) Review: *Can a Darwinian Be a Christian?: The Relationship between Science and Religion* by Michael Ruse. *The National Catholic Bioethics Quarterly* 2(3): 564-566.

RECENT PRESENTATIONS (and interviews)

- *Speaker* in the H. U. Biochemistry and Molecular Biology departmental seminar series, April 20, 2023. The title of the talk, which was a journal club-style presentation, was:

“Key Features of the Metazoan Gene Regulatory Ground State.” Recording of talk is available on YouTube:

<https://www.youtube.com/watch?v=suH6co99WZY>

- *Speaker* at the 2020 Bioengineering Colloquium hosted by the Department of Chemical and Biological Engineering at Princeton University, September 11, 2020. Title of talk: “The Genius of Ernest Everett Just.” A recording is available on YouTube at: https://www.youtube.com/watch?v=sYslT6_bn8s&t=2789s An announcement of the talk is available here: <https://cbe.princeton.edu/events/bioengineering-colloquium-virtual-seminar-genius-ernest-everett-just>
- *Interviewed* for “African American Biologists” episode (#10) of podcast “Speaking of Race,” February 28, 2018. Topic: Ernest Everett Just. Listen at: <http://speakingofrace.ua.edu/podcast/african-american-scientists> Last accessed 6-27-23
- *E. E. Just Lecturer* at the University of Chicago, Chicago, IL, November 17, 2016. Title of Talk: “E. E. Just’s Broad (and Hidden) Influence on the Development of Modern Biology.” See article about my talk in the University of Chicago student newspaper, the *Chicago Maroon*: <https://chicagomaroon.com/23295/news/annual-lecture-honors-african-american-biologist/> Last accessed 6-27-23.
- *Keynote speaker* for annual Juneteenth Celebration—Biennial Bullard Award Ceremony, Marine Biological Laboratory, Woods Hole, MA, June 17, 2016. Title of Talk: “E. E. Just’s Broad (and Hidden) Influence on the Development of Modern Biology.”
- *Speaker* in the H. U. Department of Anatomy seminar series, April 4, 2016. Title of talk: “E. E. Just’s Broad (and Hidden) Influence on the Development of Modern Biology.”
- *Invited Speaker* at the Ernest E. Just Scientific Symposium, Medical University of South Carolina, Charleston, February 26, 2016. Title of Talk: “E. E. Just’s Broad Influence on the Development of Modern Biology.” See photo of panel discussion on symposium’s Facebook site: https://www.facebook.com/photo/?fbid=1747586685458062&set=pb.100080232984540_-2207520000. Last accessed 6-27-23.
- *Presenter and Participant* for Twitter chat sponsored by the National Science and Technology News Service (NSTNS), February 26, 2015. Title of Conversation: “E. E. Just: Forgotten Father of Epigenetics.” Announcement by D. N. Lee (The Urban Scientist) at: <https://blogs.scientificamerican.com/urban-scientist/you-should-know-dr-ee-just-forgotten-father-of-epigenetics/> Last accessed 6-27-23.
- *Presenter*, Minority Health and Health Disparities Grantees’ Conference, National Harbor, MD, December 3, 2014. Title of poster presentation: “The Influence of E. E. Just on the Development of Modern Biology.”

HONORS AND AWARDS

- *Provost’s Distinguished Service Award*, January 29, 2021.

- *Featured Faculty Member*, HBCU Speakers' Bureau (Gwendolyn Bethea, Founder and President). See: <https://hbcuspbresearch.org/index.html> Last accessed 6-27-23.
- *Travel Award* from the Howard University College of Medicine's Office of Faculty Development to attend the 6th International Conference of the Association of Biochemistry Educators (ABE) in Clearwater Beach, FL, on May 7-11, 2017
- *Featured Scientist* in the 2016 promotional booklet "Honoring the Legacy of Ernest Everett Just" published by the Ernest Everett Just Foundation, Inc. (EEJFI), whose mission is to promote STEM education among minority youth
- *Professionalism Recognition Award* (for teaching excellence), Howard University College of Pharmacy (2014)
- Faculty Merit Award, Howard University (2004 & 2006)
- H.U. Fund for Academic Excellence (FFAE) *Travel Award* to attend the 2005 meeting of the Society for Developmental Biology (SDB) in San Francisco, CA
- FFAE *Travel Award* to attend the 2003 meeting of the Society for Industrial Microbiology and Biotechnology (SIMB) in Minneapolis, MN
- Individual NIH-NRSA *Postdoctoral Fellowship Award* (1995-1996)
- *Robert S. and Louise P. Allen Award*, given annually to outstanding biochemistry doctoral student at Louisiana State University (1994)
- *Travel Award* from Louisiana State University Graduate School to attend and give a presentation at the 1994 meeting of the American Society for Biochemistry and Molecular Biology (ASBMB) in Washington, DC
- *summa cum laude* (g.p.a. 4.0) graduate with Honors in English, Xavier University of Louisiana; BS in Chemistry (American Chemical Society-certified degree; 1981)
- *Mother M. Agatha Ryan Award*, awarded to a senior who "has shown a high appreciation for the spirit and standards of the university through reverence, personal integrity, loyalty, service, and scholarship," Xavier University (1981)
- *The Louis Israel Award*; the Xavier University Service Award for Seniors (1981)
- *Membership* in: Alpha Kappa Mu National Honor Society, Alpha Epsilon Honor Society, and Alpha Epsilon Delta Pre-Medical Honor Society
- The American Chemical Society (ACS) Award (1981)
- *X.U. Gold Medal Award* for highest academic achievement—all 4 years
- *ACS Undergraduate Analytical Award*; Marathon Oil Co. Award; German Award (1980)
- *Full-tuition scholarship* to Xavier University of Louisiana (all 4 years)

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- American Association for the Advancement of Science (AAAS)
- Sigma Xi