

**EMORY UNIVERSITY SCHOOL OF MEDICINE
STANDARD CURRICULUM VITAE FORMAT**

Revised: 9/5/2006

1. Name: Fanxing Zeng
2. Office Address: WMB 1203 Telephone: 404-727-1365 Fax: 404-727-3488
3. E-mail Address: fzen@emory.edu
4. Citizenship: P. R. China, H1B visa
5. Current Titles and Affiliations:
 - a. Academic appointments:
 - I. Primary appointments:
Assistant Professor, Department of Radiology, Emory University, since Sept. 1, 2005.
 - II. Joint and secondary appointments:
 - b. Clinical appointments:
 - c. Other administrative appointments:
6. Previous Academic and Professional Appointments:
2004-2005, Senior Research Associate, Department of Radiology, Emory University
7. Previous Administrative and/or Clinical Appointments:
8. Licensures/Boards:
9. Specialty Boards:
10. Education:

1999, Ph.D. in Organic Chemistry and Medicinal Chemistry, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Shanghai, China. Supervisor: Dr. Ruyun Ji and Dr. Kaixian Chen

1996, M.S. in Polymer Chemistry, Nanjing University of Science and Technology, Nanjing, China. Supervisor: Dr. Xin Wang

1993, B.S. in Organic Chemistry, Nanjing University of Science and Technology, Nanjing, China.

11. Postgraduate Training:

Emory University, supervisor: Dr. Mark M. Goodman 2003, 7-----2004, 9.
Georgia Institute of Technology, supervisor: Dr. Katherine L. Seley 2002, 6-----2003, 3.
Purdue University, supervisor: Dr. Ei-ichi Negishi 1999, 8----2002, 5.

12. Military or Government Service:

13. Committee Memberships:

- a. National and International:
- b. Regional and State:
- c. Institutional

14. Consultantships:

15. Editorships and Editorial Boards:

16. Manuscript reviewer:

17. Honors and Awards:

Marquis Who's Who in America, 60th Diamond Ed., 2006
Marquis Who's Who in Science and Engineering, 8th Ed., 2005
Research Accomplishments Award, Purdue University, 2002
P & G Prize, Chinese Academy of Sciences, 1999
Diao Award, Chinese Academy of Sciences, 1998 and 1999
Excellent Graduate Student Award, Nanjing University of Science and Technology, 1996

18. Society Memberships:

Society of Nuclear Medicine, 2004-
Society for Radiopharmaceutical Sciences, 2005-
American Association for the Advancement of Science, 2004-
Sigma Xi , Scientific Research Society, 2004-
American Institute of Chemists, 2004-
American Chemical Society, 2000-
Chemical Society of China, 1996-

19. Organization of National or International Conferences:

- a. Administrative positions:

- b. Sessions as chair:
- 20. Research focus:
 - Development of radioligands for imaging β -amyloid plaques in Alzheimer's disease and the norepinephrine transporter by positron emission tomography.
- 21. Patents
 - a. Issued:
 - b. Pending: Alzheimer's Disease Imaging Agents, Mark M. Goodman and Fanxing Zeng
- 22. Grant Support:
 - a. Active support:
 - I. Federally funded:
 - II. Private foundation funded:
 - III. Contracts:
 - IV. Other:
 - b. Previous Support
- 23. Clinical Service Contributions:
- 24. Formal Teaching:
 - a. Medical Student Teaching
 - b. Graduate Program
 - Training programs
 - Residency program
 - c. Other categories
- 25. Supervisory Teaching:
 - a. Ph.D. students directly supervised:
 - b. Post-doctoral fellows directly supervised:

- c. Residency Program
 - d. Other
26. Lectureships, Seminar Invitations, and Visiting Professorships:
27. Invitations to National or International Conferences:
28. Other Activities:
29. Bibliography:
- a. Published and accepted research articles (clinical, basic science, other) in refereed journals:
 - 1. Jeffrey S. Stehouwer, Nachwa Jarkas, **Fanxing Zeng**, Ronald J. Voll, Larry Williams, Michael J. Owens, John R. Votaw, and Mark M. Goodman, 2006, Synthesis, Radiosynthesis, and Biological Evaluation of carbon-11 Labeled 2 β -Carbomethoxy-3 β -(3'-(Z)-2-haloethenyl)phenyl)nortropanes: Candidate Radioligands for in Vivo Imaging of the Serotonin Transporter with Position Emission Tomography, *J. Med. Chem.*, accepted.
 - 2. **Fanxing Zeng**, Nachwa Jarkas, Micheal J. Owens, Clinton D. Kilts, Charles B. Nemeroff and Mark M. Goodman, 2006, Synthesis and monoamine transporter affinity of front bridged tricyclic 3 β -(4'-halo or 4'-methyl)phenyltropanes bearing methylene or carbomethoxymethylene on the bridge to the 2 β -position, *Bioorg. Med. Chem. Lett.* 16, 4661-4663.
 - 3. **Fanxing Zeng**, Jeanine A. Southerland, Ronald J. Voll, John R. Votaw, Larry Williams, Brian J. Ciliax, Allan I. Levey and Mark M. Goodman, 2006, Synthesis and evaluation of two ¹⁸F-labeled imidazo[1,2-a]pyridine analogues as pPotential agents for imaging β -amyloid in Alzheimer's disease, *Bioorg. Med. Chem. Lett.* 16, 3015-3018.
 - 4. Jeffrey S. Stehouwer, Christophe Plisson, Nachwa Jarkas, **Fanxing Zeng**, Ronald J. Voll, Larry Williams, Laurent Martarello, John R. Votaw, Gilles Tamagna, and Mark M. Goodman, 2005, Synthesis, Radiosynthesis, and Biological Evaluation of carbon-11 and Fluorine-18 (N-Fluoroalkyl) Labeled 2 β -Carbomethoxy-3 β -(4'-(3-furylophenyl)-tropanes and -nortropanes: Candidate Radioligands for in Vivo Imaging of the Serotonin Transporter with Position Emission Tomography, *J. Med. Chem.*, 48, 7080-7083.
 - 5. Xingzhong Zeng, **Fanxing Zeng**, and Ei-ichi Negishi, 2004, Efficient and Selective Synthesis of 6,7-Dehydrostipamide via Zr-Catalyzed Asymmetric Carboalumination and Pd-Catalyzed Cross-Coupling of Organozincs, *Org. Lett.*, 6, 3245-3248.
 - 6. Katherine L. Seley, Sylvester L. Mosley, and **Fanxing Zeng**, 2003, Carbocyclic Isoadenosine Analogs of Neplanocin A, *Org. Lett.*, 5, 4401-4403.

7. Ei-ichi Negishi, Mingxing Qian, **Fanxing Zeng**, Luigi Anastasia, and David Babinski, 2003, Highly Satisfactory Alkynylation of Alkenyl Halides via Pd-Catalyzed Cross-Coupling with Alkynylzincs and Its Critical Comparison with the Sonogashira Alkynylation, *Org. Lett.*, *5*, 1597-1600.
8. **Fanxing Zeng** and Ei-ichi Negishi, 2002, A Highly Efficient, Selective, and General Method for the Synthesis of Conjugated (*all-E*)-Oligoenes of the (CH=CH)_n Type via Iterative Hydrozirconation –Palladium-Catalyzed Cross Coupling, *Org. Lett.*, *4*, 703-706.
9. **Fanxing Zeng** and Ei-ichi Negishi, 2001, A Novel, Selective, and Efficient Route to Carotenoids and Related Natural Products via Zr-Catalyzed Carboalumination and Pd- and Zn-Catalyzed Cross Coupling, *Org. Lett.*, *3*, 719-722.
10. **Fanxing Zeng**, Hualiang Jiang, Yufeng Zhai, Dongxiang Liu, Haiyan Zhang, Kaixian Chen, and Ruyun Ji, 2000, Synthesis and Pharmacological Study of Huperzine A-E2020 Combined Compound, *Acta Chimica Sinica*, *58*, 580-586.
11. **Fanxing Zeng**, Hualiang Jiang, Yushe Yang, Kaixian Chen, and Ruyun Ji, 2000, Progress in Synthesis and Structural Modification of Huperzine A, *Progress in Chemistry*, *12*, 63-76.
12. **Fanxing Zeng**, Hualiang Jiang, Yufeng Zhai, Haiyan Zhang, Kaixian Chen, and Ruyun Ji, 1999, Synthesis and Acetylcholinesterase Inhibitory Activity of Huperzine A-E2020 Combined Compound, *Bioorg. Med. Chem. Lett.*, *9*, 3279-3284.
13. **Fanxing Zeng**, Hualiang Jiang, Yushe Yang, Dongxiang Liu, Jianzhong Chen, Xican Tang, Jing Liu, Jingkang Shen, Kaixian Chen, and Ruyun Ji, 1999, Syntheses and Pharmacological Studies of Huperzine A Analogues I. (±)-14-Fluorohuperzine A, *Acta Chimica Sinica*, *57*, 522-529.
14. Ruyun Ji, **Fanxing Zeng**, Yun Tang, Hualiang Jiang, and Kaixian Chen, 1999, Drug Design Based on Receptor Structures, *Huaxue Yanjiu yu Yingyong*, *11*, 591-597.
15. **Fanxing Zeng**, Hualiang Jiang, Xican Tang, Kaixian Chen, and Ruyun Ji, 1998, Synthesis and Acetylcholinesterase Inhibitory Activity of (±)-14-Fluorohuperzine A, *Bioorg. Med. Chem. Lett.*, *8*, 1661-1664.
16. **Fanxing Zeng**, Wulin Qiu, Can Li, Xujie Yang, Lude Lu, and Xin Wang, 1997, Study of Structure and Thermal Stability of Model Compound of Polyimides, *Nanjing Ligong Daxue Xuebao*, *21*, 118-123.
17. Wulin Qiu, **Fanxing Zeng**, Lude Lu, and Xin Wang, 1996, Preparation and Characterization of Bismaleimides Chain-Extended by Ureylene Linkages, *J. Appli. Polym. Sci.*, *59*, 1551-1558.
18. Wulin Qiu, **Fanxing Zeng**, Lude Lu, and Xin Wang, 1996, Synthesis and Characterization of Diaminodiphenyl Carboxylate, *Huaxue Shiji*, *18*, 31-33.
19. **Fanxing Zeng**, Wulin Qiu, Lude Lu, and Xin Wang, 1995, Synthesis and Characterization of Chain-Extended Bismaleimides, *Huaxue Shiji*, *17*, 324-328.

20. Lijun Deng, **Fanxing Zeng**, Yanhua Yao, LudeLu, and Xin Wang, 1995, Polymerization of Complex IV. Condensation Polymerization of Dichloro-(o-phenylene diamine)-zinc(II) with Pyromellitic Anhydride, *Nanjing Ligong Daxue Xuebao*, 19, 239-242.

b. Manuscripts submitted:

c. Review articles:

d. Symposium contributions:

1. **F. Zeng**, N. Jarkas, R. J. Voll, L. Williams, J. R. Votaw, L. Howell, C. D. Kilts, C. Nemeroff, M. M. Goodman, 2006, Synthesis, characterization and in vivo pet imaging in non-human primates of [11C] (S,S)-MSREBOX: a new norepinephrine transporter imaging agent, *Annual Congress of the European Association of Nuclear Medicine*, Sept. 30-Oct. 4, Athens, Greece.

2. **F. Zeng**, N. Jarkas, J. S. Stehouwer, R. J. Voll, M. J. Owens, G. Tamagnan, L. Williams, J. R. Votaw, and M. M. Goodman, 2006, Synthesis and Evaluation of a C-11 Labeled Reboxetine Analog as a Norepinephrine Transporter Imaging Agent, *53rd Annual Meeting of Society of Nuclear Medicine*, June 1-5, , San Diego, USA.

3. J. Stehouwer, N. Jarkas, **F. Zeng**, R. Voll, L. Williams, J. Votaw, M. Goodman, 2006, MicroPET imaging of the brain serotonin transporter with [¹⁸F]βFEMZIENT, *53rd Annual Meeting of Society of Nuclear Medicine*, June 1-5, , San Diego, USA.

4. **F. Zeng**, N. Jarkas, J. S. Stehouwer, R. J. Voll, L. Williams, J. R. Votaw, and M. M. Goodman, 2006, Synthesis and Biological Evaluation of Carbon-11 Labeled 2β-Carbomethoxy-3α-(3'-fluoro-4'-methylphenyl)-nortropine: Candidate PET Ligand for the Norepinephrine Transporter, *231st ACS National Meeting*, March 26-30, , Atlanta, USA.

5. J. S. Stehouwer, N. Jarkas, **F. Zeng**, R. J. Voll, L. Williams, J. R. Votaw, and M. M. Goodman, 2006, MicroPET imaging of the brain serotonin transporter with [¹¹C]mZBrENT, *231st ACS National Meeting*, March 26-30, , Atlanta, USA.

6. **F. Zeng**, R. J. Voll, J. R. Votaw, L. Williams, J. A. Southerland, B. J. Ciliax, and M. M. Goodman, 2005, Synthesis And Evaluation of ¹⁸F-Labeled FPPIP As A Prospective Radioligand For β-Amyloid in Alzheimer's Disease, *52nd Annual Meeting of Society of Nuclear Medicine*, June 18-22, Toronto, Canada.

7. **F. Zeng**, J.A. Southerland, R. J. Voll, J. R. Votaw, L. Williams, B. J. Ciliax, and M. M. Goodman, 2005, Synthesis And Evaluation of ¹⁸F-Labeled FIMPID As A PET Imaging Agent for β-Amyloid plaques, *16th International Symposium on Radiopharmaceutical Chemistry*, June 24-28, Iowa City, Iowa.

8. J.S. Stehouwer, N. Jarkas, **F. Zeng**, R. J. Voll, J. R. Williams, J. R. Votaw, and M. M. Goodman, 2005, MicroPET Imaging Of The Brain Serotonin Transporter With [¹¹C]mZIENT, *16th International Symposium on Radiopharmaceutical Chemistry*, June 24-28, Iowa City, Iowa.

9. **F. Zeng**, R. J. Voll, N. Jarkas, J. R. Votaw, L. Williams, V. M. Camp, and M. M. Goodman, 2004, Synthesis of A ^{18}F -Labeled Phenyl-Imidazo[1,2-a]pyridine Analog As A Potential Agent For Imaging β -Amyloid in Alzheimer's Disease, *51st Annual Meeting of Society of Nuclear Medicine*, June 19-23, Philadelphia, PA.
 10. Sylvester L. Mosley, **Fanxing Zeng**, and Katherine L. Seley, 2003, Carbocyclic Isoadenosine Analogues of Neplanocin A, *226th ACS National Meeting*, September 7-11, New York, NY.
 11. Xingzhong Zeng, **Fanxing Zeng**, and Ei-ichi Negishi, 2002, Studies Toward The Total Synthesis of 6,7-Dehydrostipiamide *via* Zr-Catalyzed Enantioselective Carboalumination and Pd-Catalyzed Cross-Coupling Reactions. *224th ACS National Meeting*, August 18-22, Boston, MA.
 12. **Fanxing Zeng** and Ei-ichi Negishi, 2001, A Novel, Selective, and Efficient Route to Highly Conjugated, All-*E* Polyenes Characteristic of Oxo Polyene Macrolide Antibiotics *via* Hydrozirconation and Pd- and Zn-Catalyzed Cross Coupling, *37th National Organic Chemistry Symposium*, June 10-14, Bozeman, Montana.
 13. **Fanxing Zeng** and Ei-ichi Negishi, 2000, A Novel, Selective, and Efficient Route to Carotenoids and Related Natural Products *via* Zr-Catalyzed Carboalumination and Pd- and Zn-Catalyzed Cross Coupling, *17th H. C. Brown Lectures*, April 1-3, West Lafayette, IN.
- e. Book chapters:
1. Ei-ichi Negishi and **Fanxing Zeng**, 2003, "(*E*)-1-Bromo-2-iodoethylene", in *Encyclopedia of Reagents for Organic Synthesis*, Paquette, L.A., Ed., John Wiley & Sons, Inc., New York,
 2. Ei-ichi Negishi and **Fanxing Zeng**, 2003, "(*E*)-1-Bromo-4-trimethylsilyl-1-buten-3-yne", in *Encyclopedia of Reagents for Organic Synthesis*, Paquette, L.A., Ed., John Wiley & Sons, Inc., New York.
 3. Ei-ichi Negishi and **Fanxing Zeng**, 2002, "Pd-Catalyzed Cross Coupling between Homoallyl-, Homopropargyl-, and Homobenzylmetals with Alkenyl or Aryl Electrophiles", in *The Handbook of Organopalladium Chemistry for Organic Synthesis*, E. Negishi, Ed., J. Wiley & Sons, New York, *Sect. III. 2.11.2.*
- f. Books edited and written:
- g. Book reviews:
- h. Manuals, videos, computer programs, and other teaching aids:
- i. Other publications: