



## FACULTY RESUME TEMPLATE

**I. Name:** Louise Wrensford

**Rank/Administrative Position:** Professor of Chemistry/Executive Director of Research and Sponsored Program & Graduate Dean

**Tenure/Non-tenure:** Tenure, 2005

**Department:** Natural and Forensic Sciences/Academic Affairs

**College:** Sciences and Health Professions

**Year Joined the Institution:** 1998

**Teaching Experience, including Areas of Involvement in Teaching:**

**Discipline:** Chemistry

Foundations of College Success (ASU 1201)  
General Chemistry (CHEM1211/CHEM1212)  
Survey of Chemistry (CHEM1151/CHEM1152)  
Responsible Conduct of Research (BIOL2250/CHEM2250)  
Laboratory Research Techniques (CHEM2320)  
Biochemistry (CHEM3250K)  
Chemical Literature (CHEM4110)  
Junior Seminar (CHEM4111)  
Senior Research (CHEM4120/CHEM4130)

**II. Educational Background - degree earned, academic discipline, year of award of degree, and name of institution** (List highest earned degree first)

Post Doctoral fellow	Chemistry	1991	Brown University, Providence Rhode Island
Ph.D	Chemistry	1991	Brown University, Providence Rhode Island
BS	Chemistry/Physics	1986	University of the Virgin Islands, (UVI) St. Thomas USVI

### III. Publications (complete citations in a reversed chronological order)

Porter, R., Carton, J., & Wrensford, L. (2015). *Mentoring: A Catalyst for Institutional Change in a STEM Professional Development Program*. Conference Proceedings, 8<sup>th</sup> Annual Mentoring Conference: New Perspectives in Mentoring.

Julie A. Gazmararian, Regine Haardörfer, Louise Wrensford, PhD, Michelle C. Kegler. *Comparison of Two Physical Activity Measures Among Overweight/Obese Women*, Health Behavior and Policy Review. 2015, 2(1):13-23.

C. Nicklaus Steussy, Chandra J. Critchelow, Tim Schmidt, Jung-Ki Min, Louise V. Wrensford, John W. Burgner II, Victor W. Rodwell, Cynthia V. Stauffacher, CoA as Catalyst: Hydride Transfer in 3-hydroxy-3-methylglutaryl-coenzyme A Reductase, *Biochemistry*, 2013, 52 (31), pp 5195–5205. DOI: 10.1021/bi400335g

Yonglin Zhao, Jianfeng Zhou, Liqiu Zheng, Chonggui Zhong, Louise V. Wrensford and Kwaichow Chan, (2012) Long-persistent luminescence in near-ultraviolet from silicon nanowires, *Materials Research Bulletin*, Volume 48, Issue 1, January 2013, Pages 89-91.

Michelle C. Kegler, Dean W. Swan, Iris I. Alcantra, Louise V. Wrensford, Karen Glanz, Environmental Influences on Physical Activity in Rural Adults: The Relative Contributions of Home, Church and Work Settings, *JPAH*, 2012 9, 996-1003.

Shamala Johnson and Louise Wrensford *Synthesis and Study of the dithio-Analog of acetyl thiocholine*, , Georgia Journal of Science, 2004 62, 46.

Granville Wrensford and Louise Wrensford *Enhanced Student Learning of Chemistry in a Computer Assisted Environment*, *Reaching through Teaching*, 2003, 15, 32.

Granville Wrensford and Louise Wrensford *Enhanced Student Learning of Chemistry in a Computer Assisted Environment*, , A Monograph of Research Endeavors at Albany State University, 2003 1, 1.

4. Dontavious Ford and Louise Wrensford. *In-Vitro Binding of Bile Acids to Esterified Pectin*, , Georgia Journal of Science, 2003, 61, 55.

5. Louise Wrensford, Chris Coppola and V.E. Anderson *An Acyl-CoA Chain Length Dependent Assay for 3-Oxoacyl-CoA Thiolases Employing Acetyldithio-CoA*; *Anal. Biochem*, , 1991, 192, 49.

6. Louise Wrensford, Victor W. Rodwell and V. E. Anderson, *3-Hydroxy-3-methylglutaryldithio-CoA: A potent inhibitor of Pseudomonas Mevalonii HMG-CoA reductase*. *Bio. Med. Met. Biol.*, 1991, 45, 204.

**IV. Papers Presented** (complete citations in a reversed chronological order)

1. Wrensford, L., Porter, R., Carthon, J., Mason, H., & Johnson, J. (2015). *Preparing Critical Faculty for the Future: Agents of Change to Enhance Student Engagement and Learning in STEM*. STEM Academic Renewal Conference, Crossing Boundaries: Transforming STEM Education, Seattle, WA.
2. Wrensford, L., Porter, R., Carthon, J., Mason, H., & Johnson, J. (2015). *Preparing Critical Faculty for the Future: A Professional Development Program to Enhance STEM Education*. 7<sup>th</sup> Conference on Understanding Interventions that Broaden Participation in Science Careers, San Diego, CA.
3. Wrensford, L., Porter, R., Carthon, J., Mason, H., & Johnson, J. (2015). *Preparing Critical Faculty for the Future: Agents of Change to Promote Student Engagement and Student Learning*. University System of Georgia Teaching and Learning Conference: Best Practices for Promoting Engaged Student Learning, Athens, GA.
4. Porter, R., Carthon, J., Medlin, D., Williams, J., Ofodile, C., Monds, K., Mason, H., Wrensford, L., & Johnson, J. (2014). *Increasing student Engagement Using Effective Strategies in STEM Courses*. University System of Georgia Teaching and Learning Conference: Best Practices for Promoting Engaged Student Learning, Athens, GA.
5. Porter, R., Carthon, J., Medlin, D., Williams, J., Ofodile, C., Monds, K., Mason, H., Wrensford, L., & Johnson, J. (2013). *Increasing Student Engagement in STEM Courses*. ASU Educator's Summit. Albany, GA.
6. Porter, R., Wrensford, L., Johnson, J., Carthon, J., & Mason, H. (2013). *STEM Faculty Learning Community: Increasing Students' Critical Thinking Skills Using HI-HIPs*. Paper presented at Best Practices for Promoting Engaged Student Learning. USG Conference on Teaching & Learning. Athens, GA April 4-5, 2013.
7. Liqiu Zheng, Lesshon Irby, Xiaomei Zheng, Louise Wrensford and K.C. Chan (2012) *The Galvanic Effects On Surface Roughness of Aluminum*, Georgia Journal of Science Vol. 70(1), 2012, pp29
8. Michelle Carvalho, Sally Honeycutt.; Cam Escoffery, Louise Wrensford, and Michelle Kegler, *Southwest Georgia Communities Adapting Evidence-based Programs*, Georgia Cancer Summit, June 16-17, 2011, Macon GA
9. Michelle Carvalho, Sally Honeycutt.; Cam Escoffery, Louise Wrensford, and Michelle Kegler, *Southwest Georgia Communities Adapting Evidence-based Programs*, GPHA annual meeting, April 12-13, 2011, Atlanta, GA
10. Cowins, S; Quay, O.; Wrensford, L.V; and Gadda, G.; (2008) *Kinetic Characterization of a Variant Choline Oxidase (CHO-H99N) Containing Non-Covalent FAD*. Annual Biomedical Research Conference, Orlando Florida
11. Cowins, S. and Wrensford, L.V; (2006) *A fluorescence study of the binding of dithioanalogs of acetylcholine using thioflavin T*, 58<sup>th</sup> South Eastern Regional Meeting of the American Chemical Society, Augusta, GA
12. Green, J.; Johnson, S.C.; and Wrensford, L.V; (2005) *Preparation and Study of Dithiosubstrate Analogs of Acetyl and Butyrylcholine*, 57<sup>th</sup> Southeast/61<sup>st</sup> Southwest Joint Meeting of the American Chemical Society, Memphis Tennessee.
13. Wrensford, L.V; Johnson, S.C. and Green, J.; (2005) *Preparation and Study of Dithiosubstrate Analogs of Acetyl and Butyrylcholine*, 57<sup>th</sup> Southeast/61<sup>st</sup> Southwest Joint Meeting of the American Chemical Society, Memphis Tennessee, Nov 1-4, 2005.

14. Wrensford, L.; and Wrensford, G.W.; (2003) *Higher Achievement in Chemistry using WebCT*. Granville Wrensford and Louise Wrensford. 5<sup>th</sup> Annual WebCT Users Conference, San Diego California.
15. Dontavious Ford and Louise Wrensford *In-Vitro Binding of Bile Acids to Esterified Pectin*, , Georgia Journal of Science **61**, 55 2003.
16. Wrensford, L.; and Wrensford, G.W.; (2003) *Enhanced Student Learning of Chemistry in a Computer Assisted Environment*, Georgia Conference on Teaching and Learning, Kennesaw State University, GA.
17. Johnson, S.C.; and Wrensford, L.V.; (2003) *Synthesis and Study of the dithio-Analog of acetyl thiocholine*, Albany State University FGLAMP symposium, Albany GA.
18. Burgner, J.W., Wrensford, L.V., Stauffacher, C.V. and Rodwell, V.W.; (2002) *Steric tension in the co-factor conformation facilitates cleavage of the thioester bond in HMG-CoA reductase*, Meeting Abstract. 22<sup>st</sup> Midwest Enzyme Chemistry Conference, Northwestern University, Evanston, Illinois.
19. Burgner, J.W., Wrensford, L.V., Stauffacher, C.V.; and Rodwell, V.W. (2001) *3-Hydroxy-3-methylglutaryldithio-CoA: an Alternate Substrate for HMG-CoA Reductase*. Meeting Abstract. , 21<sup>st</sup> Midwest Enzyme Chemistry Conference, Loyola University, Chicago.
20. Smith, H.H.; Sello, E.; and Wrensford, L.; (1996) *An evaluation of application of alternative onsite sewage disposal systems in the U.S. Virgin Islands*,. VI Water Resources Research Institute, University of the Virgin Islands, 1996.
21. Wrensford, L.; and Wrensford, G.W.; (1996) *The effect of Hydrocarbon residues on the fresh water supplies of St. Thomas, VI*, Granville Wrensford and Louise Wrensford, VI Water Resources Research Institute, University of the Virgin Islands.
22. Penn-Wrensford, L.V.; and Anderson, V.E. (1990) *Use of dithio analogs of Coenzyme A in assaying for thiolase and HMG-CoA Synthase*. Meeting abstract.. *Biochemistry* 29(8), 2200.

## V. Other Research/Scholarly Activities

(complete citations in a reversed chronological order)

- SSTEM Scholarship Project: Cohort Community for the Academic Achievement, Persistence and Perseverance in STEM. - Funded by NSF. 4/1/2016-3/31/2021 **\$650,000**.
- Targeted Infusion Proposal: Course-embedded Model Utilizing Nanoscience and Nanotechnology to Integrate Research into the Science Curriculum. Funded by NSF HBCU-UP program. 08/01/2014-07/31/2017, **\$399,862**
- ASU HBCU-UP Implementation Project: From Teaching Community to Learning Community – A Grass Roots Approach to Undergraduate Teaching and Learning. Funded by NSF HBCU-UP program. 08/01/2014-07/31/2018, **\$1,749,641**.
- Preparing Critical Faculty for the Future (PCFF2). Funded by NSF HBCU-UP program. **~\$34,000**.

- Biotech Research at Albany State University, Co-PI. Funded by NIH (2009-2014 ) **\$2.4 M.**
- MBRS-RISE at Albany State University, Project Director. Funded by the NIGMS (2004-2013). **\$1.25 M**
- Integration of NMR Spectroscopy for an enhanced undergraduate science curriculum at Albany State University" Principal Investigator: Dr. Louise Wrensford (2005) Army Research Office Proposal No. 48553-CH-ISP) **\$181,603**
- Biotech Research at Albany State University, Co-PI. Funded by NIH (2004-2009) **\$410,000.**
- Push-Strengthen-Pull HBCU Undergraduate Program, Co-Principal Investigator. Funded by the National Science Foundation (2004-2009). **\$2,500,000**
- Creating Opportunities in Science and Engineering, PI. Funded by the Department of Defense, (2001) **\$50,000**
- HBCU Undergraduate Program funded by the National Science Foundation, Co-Principal Investigator, 1999-2004. **\$2,225,000**
- Determination of hydrocarbon residues in the small lakes of Albany. Funded by the Graduate Faculty Scholarship Promotion and Creative Activities Fund, Albany State University graduate School (2001), **\$1,000**
- Enhancement of Chemistry and Biology Instruction by the Integration of Multi-Media Resources and Technology in the Science Curriculum, PI. Funded by the Department of Education/MSEIP (1999-2002) **\$286,942**
- Minority Investigator Research Supplement from the NHLB, Mentor; Dr. Victor Rodwell, Purdue University (1999, 2001 ) **\$10,400**
- Reinvest in Purdue Program. Collaboration with Dr. Victor Rodwell of Purdue with HMG-CoA reductase. Funded by Purdue University (1996) **\$5,000**
- Evaluating the effect of rainfall events on microbial cistern water quality. Funded USGS . (1995-1996) **\$35,000**
- Determination of the level of organic contaminants in the cistern water supplies of St. Thomas, VI. Funded USGS (1995-1996) **\$39,000**
- Computer Assisted Instruction and Support in the Chemistry Curriculum, Co Director. Funded by the University System of Georgia's Board of Regents. 1999-00, **\$10,200**
- Determination of Petroleum/hydrocarbon Residues in the Fresh Water Supplies of St. Thomas, VI. Co-Principal Investigator Funded by U.S.G.S through WRRL (1994-1995), Funded **\$60,000**

- Assay Development and Studies on the Role and Mechanism of Serine/threonine Protein Phosphatases. Planning Grant, Funded, MRCE-University of Puerto Rico, (1994 -1995) **\$8,000**

**VI. Professional Growth Activities - Seminars, Workshops, Professional Meetings, etc** (list in a *reversed* chronological order)

**VII. Institutional Services Performed, including Committee Memberships** (Please list in a *reversed* chronological order)

Selected Appointments at Albany State University

- ASU/Darton consolidation, OWG- Research Scholarship and Creative Endeavors, 2015-present
- IRB Committee, 2014- present
- Graduate Council, 2014- present
- Curriculum and New Programs committee (2009-)
- Post Tenure Committee (2008)
- Grant Reviewer, ORSP 2005-2007
- University-wide Promotion and Tenure Committee 2008
- College Promotion and Tenure Committee (2006-2008)
- Faculty Evaluation Committee, Chair 2006
- Faculty Senate Member (2005-2007)
- Department Tutor Coordinator, 2004-2008
- Department Seminar Coordinator, 2005-2008
- SACS Committee 2006-2008
- ACS Certification Chair -2007-2008
- Chemistry Program Review Chair - 2007

**VIII. Professional-Related Community Activities, including Consulting** (Please list in a *reversed* chronological order)

- 2015- present      Advisory Board Member, Flint RiverQuarium, Albany GA, 2015
- 2015, 2016      NSF Grant Reviewer
- 2008-present      Advisory Board Member, Cancer Coalition of South GA
- 2008-present      ACS General Chemistry Exam Committee
- 2008-2009      Advisory Board Member, American Chemical Society  
*InChemistry* Magazine
- 2008      Grant Reviewer American Chemical Society, Student  
Affiliate Program (2008)
- 2006-2007      Affiliate Reports Reviewer, American Chemical Society Student  
Affiliate Program (2006-2007)

**IX. Prior Experience not in Education**

**X. Professional Memberships, including offices held with dates**  
(List in a reversed chronological order)

SRA International, 2015 –present

NCURA, 2016-present

AAC&U, 2012 -present

National Science Teachers Association (2009-present)

Georgia Academy of Sciences (2009 – present)

American Chemical Society (1987-present)

**XI. Recognition & Honors** (List in a reversed chronological order)