

## **Carla Ann Theimer**

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### **POSITIONS HELD**

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#### **August 2006 - current: Assistant Professor**

University at Albany, SUNY, Department of Chemistry, Albany, NY

#### **2000 – July 2006: Postdoctoral Scientist**

UCLA, Department of Chemistry and Biochemistry, Los Angeles, CA

### **EDUCATION**

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#### **1995 – 2000: Ph.D. in Biochemistry**

Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX  
*Thermodynamic Stability and Conformational Dynamics of Model H-Type RNA Pseudoknots*

#### **1992 – 1995: M.S. in Chemistry**

Department of Chemistry, Rensselaer, Troy, NY  
*A Kinetic Study of Cholesterol Biosynthesis Inhibitors*

#### **1998 – 1992: B.S. in Chemistry**

Department of Chemistry, Rochester Institute of Technology, Rochester, NY

### **FELLOWSHIPS**

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#### **2001 – 2004: NIH NRSA Postdoctoral Fellowship**

University of California, Los Angeles, CA

#### **1995 – 1997: NIH Training Grant - Chemistry-Biology Interface Program**

Texas A&M University, College Station, TX

#### **1992 – 1993: Biochemistry and Biophysics Fellowship**

Rensselaer, Troy, NY

### **AWARDS**

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**2004** Paul D. Boyer Postdoctoral Award for Academic Excellence in Postdoctoral Research in Molecular Biology

**2004** Department of Chemistry and Biochemistry Certificate of Excellence for Postdoctoral Research in Molecular Biology

**1999** Graduate Student Research and Presentation Grant from the Association of Former Students and the Vice President for Research and Associate Provost of Graduate Studies

1999 Biochemistry Graduate Student Association Travel Award

1997 Second Place, Annual Departmental Biochemistry Research Competition

1997 Biochemistry Graduate Student Association Travel Award

## PROFESSIONAL AFFILIATIONS

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2001 American Association for the Advancement of Science

1991 Alpha Chi Sigma Professional Chemistry Fraternity -  $\beta\sigma$  chapter

## PUBLICATIONS

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**Theimer, C.A.**, and Feigon, J. (2006) Recent advances in the structural and functional characterization of telomerase RNA. *Curr. Op. Struct. Biol.* **16**, 307-318.

Richards, R.J., **Theimer, C.A.**, and Feigon, J. (2006) Structure of the *Tetrahymena thermophila* telomerase RNA helix II template boundary element. *Nucl. Acids Res.* **34**, 816-825.

**Theimer, C.A.**, Blois, C.A., and Feigon, J. (2005) Structure of the human telomerase RNA pseudoknot reveals conserved tertiary interactions essential for function. *Mol. Cell* **17**, 671-682.

Peterson, R., **Theimer, C.A.**, Wu, H., and Feigon, J. (2004) New applications of 2D filtered/edited NOESY for assignment and structure elucidation of RNA and RNA-Protein complexes. *J. Biomol. NMR* **28**, 59-67.

Illingsworth, M.L., Wang, W., Hughes, K.A., Terschak, J.A., McCarney, J.P., Stapleton, R.A., Wagner, S.R., Trotter, K.J., Courtney, R.E., Giacomini, R.A., Jensen, A.J., Moisa, M.S., Browning, T.A., Puchebner, B.E., **Theimer, C.A.**, and Chen, Y. (2004) Functional Derivatives of [4-Amino-N,N'-bis(2-hydroxybenzidene)-1,2-phenylenediaminato][N,N'-bis(2-hydroxybenzidene)-1,2-phenylenediaminato]zirconium(IV), Zr(adsp)(Rdsp), for use as Pendant Groups. *Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry* **34**, 593-609.

**Theimer, C.A.**, Finger, L.D., and Feigon, J. (2003) YNMG tetraloop formation by a dyskeratosis congenita mutation in human telomerase RNA. *RNA* **9**, 1446-1455.

**Theimer, C.A.**, Finger, L.D., Trantirek, L., and Feigon, J. (2003) Mutations linked to dyskeratosis congenita cause changes in the structural equilibrium in telomerase RNA. *PNAS* **100**, 449-454.

Giedroc, D.P., **Theimer, C.A.**, and Nixon, P.L. (2000) Structure, stability, and function of RNA pseudoknots involved in stimulating ribosomal frameshifting. *J. Mol. Biol.* **298**, 167-185.

**Theimer, C.A.** and Giedroc, D. P. (2000) Contribution of the intercalated adenosine at the helical junction to the stability of the *gag-pro* frameshifting pseudoknot from Mouse Mammary Tumor Virus. *RNA* **6**, 409-421.

**Theimer, C. A.** and Giedroc, D. P. (1999) Equilibrium unfolding pathway of an H-type RNA pseudoknot which promotes programmed -1 ribosomal frameshifting. *J. Mol. Biol.* **289**, 1283-1299.

Nixon, P.L., **Theimer, C.A.** and Giedroc, D. P. (1999) Thermodynamics of stabilization of RNA pseudoknots by cobalt(III) hexaammine. *Biopolymers* **50**, 443-458.

**Theimer, C. A.**, Wang, Y., Hoffman, D. W., Krisch, H. M., and Giedroc, D. P. (1998). Non-nearest neighbor effects on the thermodynamics of unfolding of a model mRNA pseudoknot. *J. Mol. Biol.* **279**, 545-564.