Chicago, IL

### **BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME		POSITION TITLE		
Scott T. Walsh		Assistant Professor		
eRA COMMONS USER NAME				
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)				
INSTITUTION AND LOCATION		DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Univerisity of Illinois	Champaign, IL	B.S.	08/92-12/95	Biochemistry
University of Pennsylvania	Philadelphia, PA	Ph.D.	01/97-07/00	Biophysics/Struct. Biology

Post-doc

08/00-09/03

Biophysics/Struct. Biology

# **Professional Experience:**

University of Chicago

8/93-7/95	Research Assistant, University of Illinois, Urbana-Champaign, IL  Department of Biochemistry
	Undergraduate Advisor: Professor A. Joshua Wand
7/95-12/95	Research Assistant, University of Illinois, Urbana-Champaign, IL
	Department of Biochemistry
	Research Advisor: Professor John A. Gerlt
01/96-08/96	Research Technician, State University of New York at Buffalo, Buffalo, NY
	Department of Chemistry
	Research Advisor: Professor A. Joshua Wand
08/96-01/97	Research Specialist, University of Pennsylvania, Philadelphia, PA
	Department of Biochemistry and Biophysics
	Research Advisor: Professor William F. DeGrado
01/97-08/00	Graduate Student, University of Pennsylvania, Philadelphia, PA
	Department of Biochemistry and Biophysics
	Dissertation Advisor: Professor William F. DeGrado
	Dissertation Title: "Evolution of a De Novo Designed Three-Helix Bundle Protein: from
	Structure to Function and Everything in between"
8/00-09/03	Postdoctoral Fellow, University of Chicago, IL
	Department of Biochemistry and Molecular Biology
10/04	Research Advisor: Professor Anthony A. Kossiakoff
10/01-present	Ohio State University College of Medicine and Public Health, Columbus, OH
	Assistant Professor (tenure-track), Department of Molecular and Cellular Biochemistry

## **Honors:**

Colgate-Palmolive Undergraduate Research Fellowship
Recipient of the national Harold M. Weintraub Graduate Student Award for outstanding
dissertation research
Postdoctoral Fellowship (3-years): Burroughs Wellcome Fund Fellow of the Life Sciences
Research Foundation, University of Chicago
Title: "Molecular Recognition Studies of Human Placental Lactogen"

### **Professional Societies:**

1994-present American Chemical Society

1997-present Protein Society

1997-present American Association for the Advancement of Science

2001-present Biophysical Society

### **Publications:**

Wilkinson, KD, Laleli-Sahin, E, Urbauer, J, Larsen, CN, Shih, GH, Haas, AL, Walsh, STR, & Wand, AJ (1999) "The Binding Site for UCH-L3 on Ubiquitin: Mutagenesis and NMR Studies on the Complex between Ubiquitin and UCH-L3" J. Mol. Biol. 291: 1067-1077.

- 2. **Walsh, STR**, Cheng, H, Bryson, JW, Roder, H, & DeGrado, WF (1999) "Solution Structure and Dynamics of a *De novo* Designed Three-Helix Bundle Protein" *Proc. Natl. Acad. Sci. USA* **96**: 5486-5491.
- 3. Hardy, J, **Walsh, STR**, & Nelson, HCM (2000) "Role of an  $\alpha$ -Helical Bulge in the Yeast Heat Shock Transcription Factor" *J. Mol. Biol.* **3**: 393-409.
- 4. **Walsh, STR**, Sukharev, VI, Betz, SF, Vekshin, NL, & DeGrado, WF (2001) "Hydrophobic Core Malleability of a *De Novo* Designed Three-Helix Bundle Protein" *J. Mol. Biol.* **305**: 361-373.
- 5. **Walsh, STR**, Lee, AL, DeGrado, WF, & Wand, AJ. (2001) "Dynamics of a *De novo* Designed Three-Helix Bundle Protein Studied by <sup>15</sup>N, <sup>13</sup>C, and <sup>2</sup>H NMR Relaxation Methods" *Biochemistry* **40**: 9560-9569.
- Schiffer, C, Ultsch, M, Walsh, S, Somers, W, de Vos, AM, & Kossiakoff, A (2002) "Structure of a Phage Displayed-derived Variant of Human Growth Hormone Complexed to Two Copies of the Extracullular Domain of its Receptor: Evidence for Strong Structural Coupling between Receptor Binding Sites" *J. Mol. Biol.* 316: 277-289.
- 7. **Walsh, STR**, Cheng, RP, Wright, WW, Alonso, DOV, Daggett, V, Vanderkooi JM, & DeGrado, WF (2003) "The Hydration of Amides in Helices: a Comprehensive Picture from Molecular Dynamics, IR, and NMR" *Protein Sci.* **12**: 520-531.
- 8. **Walsh, STR**, Jevitts, LM, Sylvester, JE, & Kossiakoff, AA. (2003) "Site2 Binding Energetics of the Regulatory Step of Growth Hormone-Induced Homodimerization" *Protein Sci.*: **12**: 1960-1970.
- 9. **Walsh, STR**, Sylvester, JE, & Kossiakoff, AA (2004) "The High and Low Affinity Receptor Binding Sites of Growth Hormone are Allosterically Coupled" *Proc. Natl. Acad. Sci. USA* **101**: 17078-17083.