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SCHOLTZ

TEXAS PROTEIN FOLDERS '97

Camp Allen

March 21-23, 1997

Sponsors of the 1997 TEXAS Protein Folders Meeting

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Sealy Center for Structural Biology
University of Texas Medical Branch @ Galveston
301 University Blvd.
Galveston, Texas 77555

5th Annual Texas Folders Program

Friday - March 21, 1997

4:00 - 7:00 P.M. Check-In and Refreshments

7:00 PM Dinner

Session I **Robert Fox**, Session Chair
Human Biological Chemistry and Genetics, University of
Texas Medical Branch @ Galveston

8:00 PM **Ken Dill**, Professor,
Univ. of California at San Francisco

Sightseeing on the Pathways to Protein Folding

9:00 Group Discussion/Posters/Refreshments

Hagen et al (1996) PNAS 116:15-7 } μ sec?
Rate of 3° HB formation (at 6°C)

Saturday - March 22, 1997

8:00 AM Breakfast

Schwartz
0.1 μ sec Helix Kinetics
JMB (1965) 11 64
2° structure
Hummer?? JACS

Session II Marty Scholtz, Session Chair
Medical Biochemistry, Texas A&M Univ.

9:00 10^2
↓
Barry Nall
Dept. of Biochemistry, UT Health Science Center @ San Antonio

ProSeu (1997) → Fast Folding of Cytochrome C ~ 300 ms not 0.1 μ sec
16 hrs for His mutants T-jumps are μ sec

9:30 → George Makhatadze
Dept. of Chemistry and Biochemistry, Texas Tech Univ.

Helix Capping Propensities of Amino Acid Residues in the
Alpha L Motif

10:00 10^5
↓
Monty Pettitt
Dept. of Chemistry, Univ. of Houston

Micro Folding and Phase Stability

10:30 BREAK

Session III David Gorenstein, Session Chair
Human Biological Chemistry and Genetics, Univ. of Texas
Medical Branch @ Galveston

11:00 John Osterhout
The Rowland Inst. for Science

Solution Structure of $\alpha\alpha$, a Helical Hairpin Peptide of De
Novo Design Intended as a Model System for the Second
Stage of Protein Folding

11:30 Huguette Pelletier
Dept. of Biochemistry, Baylor College of Medicine

The Helix-Hairpin-Helix Motifs of Human DNA
Polymerase-Beta; A Novel DNA-Binding Motif with
Multiple Functions

12:00 Rui Sousa

Fig 7.44
from Scholtz

Kilgus

Dept. of Biochemistry, UT Health Science Ctr. @ San Antonio

Structure and Mechanism of an RNA Polymerase

12:30 PM

LUNCH

1:30

FREE TIME

3:30

Posters

6:00PM

Dinner

Session IV

Boyd Hardesty, Session Chair

Dept. of Chemistry and Biochemistry, Univ. of Texas, Austin

7:00

Samuel J. Landry

Dept. of Biochemistry, Tulane Univ. School of Medicine

Backbone Dynamics in Human Hsp10

7:30

Robert Fox

Human Biological Chemistry and Genetics, Univ. of Texas
Medical Branch @ Galveston

Structural Insights into a GroEL-Bound Protein

8:00

Wieslaw Kudlicki,

Chemistry & Biochemistry, Univ. of Texas @ Austin

**Ribosomes and Ribosomal RNA as Chaperones for Folding
of Proteins**

8:30

Group Discussion/Posters/Refreshments

Sunday, March 31, 1997

8:00 AM **Breakfast**

Session V **Jim Hu**, Session Chair,
Biochemistry, Texas A&M Univ.

*Talk to NP about
CR h/c theory*

9:00 AM **Nick Pace** *Lifson-Ring theory to slide*
Medical Biochemistry, Texas A&M Univ.

*WV
SS*

A Direct Comparison of Helix Propensity in Proteins and Peptides

9:30 **Wayne Bolen**
Human Biological Chemistry and Genetics, Univ. of Texas
Medical Branch @ Galveston

The Role of the Thermodynamic Character of Denatured Ensembles in Interpreting Unfolding Free Energy Changes

10:00 **Jeff Kelly**
Texas A&M University

A Mechanistic Study of Transthyretin's Denaturation Pathway Leads to a Small Molecule Therapeutic Strategy For Intervention in Human Amyloid Disease

10:30 **Break**

Session VI **Miriam Ziegler**, Session Chair, Biochemistry &
Biophysics, Texas A&M Univ.

11:00 **Betsy Goldsmith**
Biochemistry, UT Southwestern Medical Center

Kinetically Controlled Folding of the Serpin Plasminogen Activator Inhibitor-1

11:30 **Tom Baldwin**
Biochemistry & Biophysics, Texas A&M University

Kinetic Control of Protein Folding

12:00 **Lunch and Checkout**