

## CURRICULUM VITAE AND BIBLIOGRAPHY

NAME: **Ann-Bin Shyu, Ph. D.**

PRESENT TITLE: Professor of Biochemistry and Molecular Biology  
The Jesse H. Jones Chair in Molecular Biology  
The University of Texas- Health Science Center at Houston

WORK ADDRESS: Department of Biochemistry & Molecular Biology  
The University of Texas- Health Science Center at Houston  
McGovern Medical School  
6431 Fannin Street, Rm 6.200  
Houston, Texas 77030 USA

### UNDERGRADUATE EDUCATION:

1976-1980 B.S., Department of Zoology, National Taiwan University,  
Taipei, Taiwan

### GRADUATE EDUCATION:

1982-1986 Ph.D. in Molecular, Cellular, and Developmental Biology,  
Department of Biology, Indiana University, Bloomington, IN

### POSTGRADUATE TRAINING:

1987-1990 Post-doctoral Research Fellow, Department of Microbiology and  
Molecular Genetics, Harvard Medical School, Boston, MA

### ACADEMIC & ADMINISTRATIVE APPOINTMENTS:

1982-1986 Graduate Research Assistant, Department of Biology,  
Indiana University, Bloomington, IN

1987-1990 Postdoctoral Fellow, Department of Microbiology and Molecular  
Genetics, Harvard Medical School, Boston, MA

1990-1996 Assistant Professor, Department of Biochemistry and Molecular Biology,  
The University of Texas, Medical School at Houston, Houston, TX

1996-2001 Associate Professor, Department of Biochemistry and Molecular Biology,  
The University of Texas, Medical School at Houston, Houston, TX (with  
tenure)

2000-2005 Director, Graduate Program for Biochemistry and Molecular Biology,  
The University of Texas, Medical School at Houston, Houston, TX.

2002 Vice chair, Medical School Graduate Education Council,  
The University of Texas, Medical School at Houston, Houston, TX

2003 Chair, Medical School Graduate Education Council,  
The University of Texas, Medical School at Houston, Houston, TX

2001-present Professor, Department of Biochemistry and Molecular Biology, The University of Texas- Health Science Center at Houston, McGovern Medical School, Houston, TX (with tenure)

#### HORNORS AND AWARDS:

1988-1990 Postdoctoral Research Fellowship, American Cancer Society  
Massachusetts Division  
1990 Postdoctoral Research Fellowship, Medical Foundation, Inc./Charles A. King Trust (declined)  
1993 Award for Outstanding Achievements in Research by the University of Texas-Health Science Center at Houston  
1993-1995 Junior Faculty Research Award, the American Cancer Society  
1995-2000 Established Investigator Award, the American Heart Association  
1997, 1999 Dean's Excellence Awards - the University of Texas Health Science Center at Houston  
2001 HSC Honor Convocation Recipient, the University of Texas, Health Science Center at Houston  
7/2002 Chair, RNA Turnover session, NATO Advanced Research Workshop on Translational Control RNA decay, Tucson, Arizona.  
7/2003 Chair, RNA Turnover session, Annual Meeting of RNA Society, Vienna, Austria.  
6/2004 The University of Texas Health Science Center at Houston Graduate School of Biomedical Science (GSBS) Faculty membership renewal commended by the Membership Committee (only 5% of the GSBS Faculty is reappointed with commendation)  
2004-2008 Senior Investigator Award, the Sandler Foundation for Asthma Research  
8/2005 Chair, RNA Turnover session, Cold Spring Harbor Meeting on RNA Processing, Cold Spring Harbor, NY.  
2013, 2014, 2016 Dean's Teaching Excellence Award - the University of Texas Health Science Center at Houston  
2016-2018 Discovery Award, UTHealth Pulmonary Center of Excellence  
2005-present The Jesse H. Jones Endowed Chair in Molecular Biology, The University of Texas Health Science Center at Houston  
2018-2023 The Maximizing Investigators' Research Award (MIRA), NIGMS, NIH

#### EDITORIAL POSITIONS:

2000-2008 Member, Editorial Board, *Molecular and Cellular Biology*

#### REVIEWER FOR JOURNALS: 1991 – present

Invitations from the following journals (**partial** list):

*BBA-Mol Cell Research Biochemistry*  
*Biochemical Pharmacology*  
*BioMed Central Genomics*  
*BioMed Central Mol Biol*

*BioMed Central Genetics*  
*BioMed Central Gastroenterology*  
*Cancer Cell*  
*Cancer Research*  
*Cell*  
*Cell Reports*  
*Current Biology*  
*Developmental Cell*  
*EMBO J.*  
*EMBO reports*  
*eLife*  
*European J. Cell Biol*  
*Experimental Cell Research*  
*FASEB J*  
*FASEB Letters*  
*Gene*  
*Genes & Development*  
*J Biol Chem*  
*J Cell Biol*  
*J Cell Sci*  
*J Immunology*  
*Mol Biol of the Cell*  
*Mol Cancer Res*  
*Mol Cell*  
*Mol Cell Biol*  
*Nature*  
*Nature Strul & Mol Biol.*  
*Nature Chem Biol*  
*Nature Communications*  
*Nature Genetics*  
*Nature Microbiology*  
*Nature Review Mol Cell Biol*  
*Nucleic Acids Research*  
*Oncogene*  
*Oncotarget*  
*PLoS Biology*  
*PLoS Genetics*  
*PLoS One*  
*PNAS*  
*RNA*  
*RNA Biology*  
*Science*  
*Scientific Reports*  
*Structure*  
*TiBS*

SERVICES & INVITATIONS ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS,  
COMMITTEES:

10/1992	<u>Ad Hoc</u> member of site visit team for core programs submitted to the National Cancer Institute by McArdle Laboratory for Cancer Research
1993	<u>Ad Hoc</u> reviewer for the National Science Foundation
8/1993, 2/1996	<u>Ad Hoc</u> reviewer for the Dept. of Veterans Affairs, Health Service and Research Administration, Merit Review Board for Hematology.
2/1994	<u>Ad Hoc</u> member for the National Institutes of Health (NIH), Biological Sciences II study section
9/1994-6/1998	Member for NIH Biological Sciences II study section
9/1996, 12/1996, 6/1999	<u>Ad Hoc</u> reviewer for NIH, Molecular Biology Study Section
10/1999-6/2003	Member for NIH, Cell Development and Function (CDF-1) study section (formerly molecular biology).
3/2004	Teleconference, Bcl-2 and Cancer Therapy special panel meeting, ONC-B study section, NIH
10/2006	<u>Ad Hoc</u> reviewer for NIH, MGB study section
3/2009	Teleconference reviewer for NIH on a Program Project.
5/2009	<u>Ad Hoc</u> reviewer for NIH Challenging grants.
1/2012, 10/2013, 2/2015	<u>Ad Hoc</u> reviewer for NIH, MGB study section.
1/2016	<u>Ad Hoc</u> reviewer for NSF, Electronic Proposal Review panel.
1/2016	<u>Ad Hoc</u> reviewer for NIH, CDBB study section for Postdoc Fellowship (F05 awards).
6/2018	<u>Ad Hoc</u> reviewer for NIH, ZRG1 GGG-D (90) S-Special Emphasis Panel.
10/2018	Participant reviewer for NIH, CRS Anonymous Study Applications.
6/2019	<u>Ad Hoc</u> reviewer for NIH, MGB study section.
11/2019; 6, 11/2020	<u>Ad Hoc</u> reviewer for NIH, NIGMS R35/MIRA study section.
1/2020, 1/2021	<u>Ad Hoc</u> reviewer for NIH, NIH Director's Pioneer Award, Stage 1 review panel.

**SERVICE ON THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON COMMITTEES:**

1992-1993	Faculty Interviewer, Office of Academic Affairs (Medical School), the University of Texas Houston Health Science Center
1992-1999	Program's Graduate Student Recruitment Committee, Department of Biochemistry and Molecular Biology, The University of Texas-Medical School at Houston
7/1993-6/2001	Radiation Safety Committee, the University of Texas-Houston Health Science Center
1994	Faculty Recruitment for the Department of Pharmacology, the University of Texas Medical School at Houston
4/1998-6/2001	Scientific Review Committee, the University of Texas Houston Health Science Center
Fall/1999	Member, Faculty recruitment committee, Department of Biochemistry and Molecular Biology, the University of Texas Medical School at Houston.

2/2003-4/2004	Internal Review Committee, Review of the Microbiology and Molecular Genetics Department, the University of Texas-Houston Health Science Center
Fall/2000-2005	Member, Medical School Graduate Education Council, The University of Texas Medical School at Houston (elected as vice chair, 2002) (elected as Chair, 2003)
9/2006-6/2007	Chair, Faculty Search Committee, Department of Biochemistry and Molecular Biology, the University of Texas-Medical School at Houston.
2007	Member, DMO Search Committee, Department of Biochemistry and Molecular Biology, the University of Texas-Medical School at Houston.
11/2014	Chair, Bioinformatics Faculty Search Committee, Department of Biochemistry and Molecular Biology, the University of Texas- Medical School at Houston.
11/2015	Member, Faculty Search Committee, Department of Biochemistry and Molecular Biology, the University of Texas- Medical School at Houston.
8/2017, 3/2019	Member, Ad hoc Committee, Faculty Appointments, Promotions and Tenure Committee, the University of Texas- HSC at Houston.
9/2009 – present	Member, Candidacy Exam Committee, Department of Biochemistry and Molecular Biology, the University of Texas- Medical School at Houston.

#### SERVICE ON GRADUATE SCHOOL COMMITTEES:

1992, 1993	Judge for the Annual Graduate Student Poster Session, Graduate School of Biomedical Science, the University of Texas-Houston Health Science Center
1993-1996, 1998 -1999	Admissions Committee, GSBS, the University of Texas-Houston Health Science Center
1999-2001	Summer Research Program, Biochemistry and Molecular Biology (BMB) Program Coordinator, the University of Texas-Houston Health Science Center
1998-2002	Departmental Retreat, BMB Program Coordinator, the University of Texas-Houston Health Science Center
2000-2005	BMB Graduate Program Director, the University of Texas-Houston Health Science Center
2000-2005	Member, GSBS Program Coordinating Committee, the University of Texas-Houston Health Science Center
2021	Judge for the 2021 BCB Directors Award, GSBS, the University of Texas Health Science Center at Houston

#### SERVICE ON M.S. & PH.D. ADVISORY/SUPERVISORY & EXAMINING COMMITTEES:

##### Baylor College of Medicine:

2001 – 2007	Carlos I. Rivera, Ph.D. student, Baylor College of Medicine
2006 - 2009	Jennifer Bonderhoff, Ph.D. student, Baylor College of Medicine
2010 – 2014	Jon Dougherty, Ph.D. student, Baylor College of Medicine
2018 – 2019	Clara Ribadeneyra, Ph.D. student, Baylor College of Medicine

GSBS: (partial list since 2007)

2007 - 2014	Brian Pickering, Ph.D. student
2009 - 2013	Borislava Tsanova, Ph.D. student
2011 - 2014	Jia Shen, Ph.D. student
2012 - 2016	Shih-Shin Chang, Ph.D. student
2016 - 2018	Junsuk Ko, Ph.D. student
2013 - 2019	Scott Collum, Ph.D. student

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE AND POSTDOCTORAL TRAINING:

6/1991-11/1992	Yun You, Master student
7/1993-5/1998	Sheila Peng, Ph.D. student
8/1994-5/1999	Nianhua Xu, Ph.D. student
8/1995-5/1996	Tim Whitaker, postdoctoral fellow
1/1996-2/1999	Paul. Loflin, postdoctoral fellow
2/1998-10/1999	Christophe Grosset, postdoctoral fellow
6/1997-4/1999	Huanmei Wu, Ph.D. student (quitted due to pregnancy)
8/1998-5/2004	Tsung-Cheng Chang, Ph.D. student
6/1999-3/2001	Nianhua Xu, Ph.D., Postdoctoral fellow
5/2000-7/2003	Simon Durdan, Ph.D., Postdoctoral fellow
4/2003-3/2005	Akio Yamashita, Ph.D., Postdoctoral fellow
4/2003-3/2005	Yukiko Yamashita, M.D., Postdoctoral fellow
6/2004-12/2005	Tsung-Cheng Chang, Ph.D., Postdoctoral fellow
8/2004-8/2010	Dinghai Zheng, Ph.D. student
9/2004-12/2006	Zhenping Zhong, Ph.D., Research Scientist
9/2005-9/2008	Nader Ezziddine, Ph.D., Postdoctoral fellow
5/2006-3/2009	Yuxin Zhai, Ph. D., Postdoctoral fellow
10/2009-9/2010	Sheng Li, Ph.D., Postdoctoral fellow
1/2010-10/2011	Amanda Chadee, Ph.D., Postdoctoral fellow
4/2011-11/2011	Danielle Martinez, Ph.D., Postdoctoral fellow
5/2011-6/2016	Kai-Lieh Huang, Ph.D. student
1/2012-9/2014	Yueqiang Zhang, Ph.D., Postdoctoral fellow

SUMMER STUDENTS

Summer, 1995	Captain Liang
Summer, 1996	Karen Gerlach
Summer, 1997	Spencer Chang

TEACHING RESPONSIBILITIES:

1990-1992, 1994	Graduate School Course in the Molecular Basis of Gene Action, the University of Texas Graduate School of Biomedical Sciences
1995-1998, 2001	Graduate Course in the Eukaryotic Gene Expression, the University of Texas Graduate School of Biomedical Sciences
1997-1998, 2000-2002	Seminar in Biochemistry and Molecular Biology
1997-1999	Departmental Research Workshop

1999-2002	Graduate Course in Advanced Biochemistry
2002-2003	Seminar in Experimental Pathology
1993-1999, 2001-2014	Graduate School Course in the Current Methods in Molecular Research, the University of Texas Graduate School of Biomedical Sciences
2000-2014	Graduate Course in Topics in Biochemistry and Molecular Biology
1991-2015	Medical School Course in Human Biochemistry, the University of Texas-Health Science Center at Houston McGovern Medical School
2014 - 2018	Emerging fields in Biochemistry and Molecular Biology: RNA Biology
2014 - 2017	Graduate Core Course in Foundations of Biomedical Research
2016 - 2017	Medical School Team-Based-Learning (TBL), the University of Texas-Health Science Center at Houston McGovern Medical School
2019, 2021	RNA Biology Course
2014 - present	Current Methods in Structural and Molecular Biology

#### ADDITIONAL MENTORING ACTIVITIES:

1992-1994	Tsuey-Ming Chen, Research Assistant
9/2001-12/2001	Chris Wilson, tutorial student
2/2002-8/2002	Ye Tao, tutorial student
10/2001-5/2008	Wenmiao Zhu, Research Assistant
4/2003-3/2005	Yukiko Yamashita, M.D., Research Assistant
9/2004-12/2006	Zhenping Zhong, Ph.D., Research Scientist
10/2006-9/2010	Zhenfang Xia, Senior Research Assistant
9/2010-12/2010	Rita Sirrieh, tutorial student
10/2010-5/2011	Kristen Rogers, Research Assistant II
4/2012-3/2015	Lingzhi Liu, Research Associate
1/2014-1/2016	Yi-Fang Ho, Senior Research Assistant
11/2015-5/2019	Krista Strouz, Research Assistant I
09/2016-09/2019	Wenbo Li, Ph.D., Assistant Professor
09/2018-present	Kuang-Lei Tsai, Ph.D., Assistant Professor

#### SEMINAR INVITATIONS: (**partial** list since 2007)

6/2007	RNA '07 meeting, the Annual meeting of RNA Society, Madison, WI
7/2007	EMBL, Heidelberg, Germany
12/2007	W.M. Keck Center for Innovative Cancer Therapies, MD Anderson Cancer Center, Houston, TX
12/2007	Center for Molecular Development and Disease, IBT, Texas A&M Health Science Center, Houston, TX.
1/2009	Department of Molecular Physiology and Biophysics, Baylor College of Medicine, TX
5/2009	RNA '09 meeting, the Annual meeting of RNA Society, Madison, WI.
7/2010	The 2010 FASEB Summer meeting on RNA turnover, Carefree, AZ.

10/2010 4<sup>th</sup> RNA Stability Meeting on "RNA Turnover and Translation: Biological and Pathological Ramifications", Montreal, Canada.

4/2011 Department of Oral Biology, University of Florida, Health Science Center, Gainesville, FL

3/2012 Department of Genetics, MD Anderson Cancer Center, Houston, TX.

3/2012 Department of Biochemistry & Molecular Biology, Louisiana State University, Health Sciences Center, Shreveport, LA.

4/2012 Department of Genetics, Case Western Reserve University, Cleveland, OH.

12/2012 Institute of Cellular and Organismic Biology, Academia Sinica, Taiwan

12/2012 Okinawa Institute of Science & Technology, Okinawa, Japan

12/2012 The 85<sup>th</sup> Annual Meeting of Japanese Biochemical Society, Fukuoka, Japan

4/2013 EMBO Conference on "Eukaryotic RNA Turnover: from Structural Insights to Diseases", Strasbourg, France.

8/2013 Gordon Research Conference on "Cellular & Molecular Mechanisms of Toxicity", Andover, NH

11/2013 Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan

6/2014 2014 Annual International Workshop of the Bordeaux RNA Club, Bordeaux, France

7/2014 The 2014 FASEB Science Research Conference on "Post-Transcriptional Control of Gene Expression: Mechanism of mRNA Decay", Big Sky, MT

7/2016 The 2016 FASEB Science Research Conference on "Post-Transcriptional Control of Gene Expression: mRNA Decay", Lisbon, Portugal

9/2016 Center for Cardiovascular Regeneration, Houston Methodist Research Institute, Houston, TX

11/2017 The OIST meeting for "Cutting Edge Developments in RNA Biology for the Control of Gene Expression", Okinawa Institute of Science & Technology, Okinawa, Japan

12/2017 University of Kentucky, Department of Molecular and Cellular Biochemistry, Lexington, KY

4/2018 Discovery Award Symposium, Pulmonary Center of Excellence, UTHealth, Houston, TX

3/2020 The Faculty Keynote Speaker, Annual BMB Departmental Research Retreat, McGovern Medical School, UTHealth, Houston, TX

7/2022 Annual RNA Biology Laboratory Seminar Series, Center for Cancer Research, NCI, NIH.

#### ONGOING GRANT SUPPORT:

1. R35/MIRA GM127109 ((impact score=3; ZRG1 CB-K (55) study section)  
P.I. – Shyu (51% effort) 04/01/2018 – 03/31/2023  
NIH/NIGMS Total direct cost: \$1,485,325  
Project title: "Regulation of Messenger RNA Turnover in Mammalian Cells"
2. The Jesse H. Jones Endowment UTHSC-Houston  
P.I. - Shyu 9/1/2005 – present

#### PENDING GRANT SUPPORT:

None

#### PAST GRANT SUPPORT:



7/1991-7/1996	National Institute of General Medical Sciences, PI, Research Grant "Messenger RNA Decay of Immediate Early Genes". (RO1 GM46454-01; 5 yr.). Total direct cost: \$625,163 (Molecular Biology study section; Score=133; percentile=6.7%)
1993-1995	American Cancer Society, Junior Faculty Research Award. PI, "Decay Mechanisms of Growth Factor Inducible mRNAs". Total award: \$90,500
7/1995-12/1998	The Council for Tobacco Research, Inc., USA, PI, "The role of the p64 RNA-binding protein in the turnover of the <i>c-fos</i> proto-oncogene mRNA" Total direct cost : \$184,500
7/1995-6/2000	American Heart Association, Established Investigator Award. PI "Molecular Basis of Differential mRNA Decay of Early Response Gene." Total award: \$250,000
7/1996-6/2000	National Institute of General Medical Sciences, PI, "Messenger RNA Decay of Immediate Early Genes". Total direct cost: \$ 705,000 First Competitive Renewal (RO1 GM46454-06) (Molecular Biology study section; Score=130; percentile=15%)
5/2000-4/2004	National Institute of General Medical Sciences, PI, "Mammalian mRNA turnover by elements in protein coding region.". Total direct cost: \$520,000; New grant (RO1 GM59211) (CDF-2 study section; score=184; percentile=21.4%)
7/2000-6/2004	National Institute of General Medical Sciences, PI, "Messenger RNA Decay of Immediate Early Genes". Total direct cost: \$740,000 Competitive Renewal (RO1 GM46454-10) (CDF-2 study section; score=154; percentile=9.8%)
7/2004-6/2008	The Sandler Program for Asthma Research, P.I., "Cytokine and Chemokine mRNA Turnover and Airway Inflammation.". Total direct cost: \$750,000; Senior Investigator Award. (among 12 successful applicants of the 196 who applied)
7/2004-12/2008	National Institute of General Medical Sciences, PI, "Messenger RNA Decay of Immediate Early Genes". Total direct cost: \$1,441,712 Competitive Renewal (RO1 GM46454-14) (CDF-2 study section; score=149; percentile=11.6%)
6/2009-9/2009	Just-missed-grant fund, UTHSC-Houston, PI, " Translational Regulation in Bronchial Epithelial Cells ". Total direct cost: \$50,000
3/2009-2/2013	NIH/NIGMS, PI, "Messenger RNA Decay of Immediate Early Genes". Total direct cost: \$1,355,384 Competitive Renewal (RO1 GM46454-18)

(MGC study section; score=146; percentile=15.7%)

- 9/2009 – 8/2010 NIH/NIAID, PI, "Translational Regulation in Bronchial Epithelial Cells", Total direct cost: \$250,000, R56 AI 077679-01A1 (Bridging fund) (primary score=175; percentile=29%, LCMI study section)
- 4/2010 – 3/2012 Cancer Prevention and Research Institute of Texas, co-I, "Understanding the Connection Between Alternative mRNA 3' End Formation and microRNA Function During Tumorigenesis" Total direct cost: \$200,000 (Wagner)
- 8/2010 – 6/2015 NIH/NIHL, co-I, "Adenosine Signaling and Lung Fibrosis" Total direct cost: \$1,000,000, RO1 HL070952-12 (Blackburn) Formation and microRNA Function During Tumorigenesis"
- 7/2011 – 6/2016 NIH/NIAID, PI, "Translational Regulation in Bronchial Epithelial Cells" Total direct cost: \$1,000,000 (RO1 AI 077679-04) (impact score=24; percentile=12%, LCMI study section)
- 8/2013 - 3/2018 NIH/NIGMS, PI, "Messenger RNA Turnover in Mammalian Cells" Total direct cost: \$1,320,000 Competitive Renewal (RO1 GM46454-21) (MGB study section; impact score=3; percentile=12%)
- 1/1/16-12/31/18 UTHealth Pulmonary Center of Excellence, PI, "MicroRNA and mRNA epigenetics as posttranscriptional regulators of allergic airway inflammation" Total direct cost: \$300,000

## PUBLICATIONS:

### A. Abstracts:

1. Shyu, A.-B., Greenberg, M. E., and Belasco, J. G.: Two distinct pathways for rapid degradation of *c-fos* mRNA. 1989 Meeting on RNA Processing, Cold Spring Harbor, New York, May 17-21, 1989.
2. Shyu, A.-B., Greenberg, M. E., and Belasco, J. G.: Two distinct pathways for rapid degradation of *c-fos* mRNA. Fifth Annual Meeting on Oncogenes, Frederick, Maryland, June 27 - July 1, 1989.
3. Shyu, A.-B., Belasco, J. G., and Greenberg, M. E.: Two distinct pathways for rapid degradation of *c-fos* mRNA. 1989 Meeting on Translational Control, Cold Spring Harbor, New York, September 13-17, 1989.
4. Shyu, A.-B., Chen, C.-Y. A., Baradaran, K., Greenberg, M. E., and Belasco, J. G.: Targeted degradation of the *c-fos* proto-oncogene transcript. NATO/EEC Workshop, Goslar, West Germany, April 6-12, 1990.
5. Shyu, A.-B., Chen, C.-Y. A., and You, Y.: Identification of cellular proteins that binds specifically to the AU-rich destabilizing element in the 3' untranslated region of *c-fos* mRNA. ASBMB/Biophysical Society Joint Meeting, Houston, Texas, February 9-13, 1992.
6. Chen, C.-Y. A., You, Y., and Shyu, A.-B.: Two purine-rich sequence binding proteins interact specifically with a 40-nucleotide AG-rich domain of a *c-fos* 320-nucleotide coding region

- determinant of mRNA instability. Annual Faculty Poster Session, The University of Texas Graduate School of Biomedical Sciences, Houston, Texas, August 31, 1992.
7. Shyu, A.-B., You, Y., and Chen, C.-Y. A.: Two purine-rich sequence binding proteins interact specifically with a 40-nucleotide AG-rich domain of a *c-fos* 320-nucleotide coding region determinant of mRNA instability. 1992 Meeting on Translational Control, Cold Spring Harbor, New York, September 9-13, 1992.
  8. Shyu, A.-B., You, Y., and Chen, C.-Y. A.: Two Cellular Proteins Bind Specifically to a Purine-Rich Sequence Necessary for the Destabilization Function of a *c-fos* Protein Coding Region Determinant of mRNA Instability. Jacques Monod Conference on Cytoplasmic Aspects of the Post-transcriptional regulation of gene expression, La Londe-les-Maures, France, March, 1993.
  9. Chen, A. C.-Y., Chen, T.-M., Shyu, A.-B.: Interplay of two functionally and structurally distinct domains of the *c-fos* AU-rich element specifies its mRNA destabilizing function. NATO Advanced Research Workshop on "Posttranscriptional control of gene expression: the central role of RNA structure", Aruba, The Dutch Antilles, April, 1994.
  10. Chen, C.-Y. A. and Shyu, A.-B.: Selective degradation of early-response-gene mRNAs: Functional analyses of sequence features of the AU-rich elements. 1994 Meeting on Translational Control, Cold Spring Harbor, New York, August, 1994.
  11. Chen, C.-Y. A., Xu, Nianhua, and Shyu, A.-B.: Distinct mechanisms of AU-rich element-directed mRNA decay-direct comparison of *c-fos* ARE and GM-CSF ARE. 1995 Meeting on RNA Processing, Cold Spring Harbor, New York, May, 1995.
  12. S. Peng, Chen, C.-Y. A., and Shyu, A.-B.: Functional characterization of a non-AUUUA AU-rich element from the *c-jun* protooncogene: Evidence for the existence of distinct class of AU-rich element. San Francisco Symposium '95 on "Translation & Stability of mRNA", San Francisco, California, 1995.
  13. Chyi-Ying A. Chen, Nianhua Xu, Sheila S.-Y. Peng, and Ann-Bin Shyu.: Classification and mechanism of AU-rich element-mediated mRNA decay. San Francisco Symposium '95 on "Translation & Stability of mRNA", San Francisco, California, 1995.
  14. Ann-Bin Shyu, Nianhua Xu, Sheila S.-Y. Peng, and Chyi-Ying A. Chen: AU-RICH ELEMENT-DIRECTED mRNA TURNOVER: SEQUENCE FEATURES AND MECHANISMS. 1996 Keystone Symposia Conference on "Posttranscriptional RNA Processing, Hilton Head Island, South Carolina.
  15. Ann-Bin Shyu, Chyi-Ying A. Chen, and Nianhua Xu: Modulation of the fate of cytoplasmic mRNA by AU-rich elements: Key sequence features controlling mRNA deadenylation and decay. Cold Spring Harbor Laboratory Meeting on "Translational Control", Cold Spring Harbor, New York, September, 1996.
  16. Ann-Bin Shyu, Nianhua Xu, and Chyi-Ying A.: AU-rich element mediated mRNA turnover. Jacques Monod Conference on Cytoplasmic Aspects of the Post-transcriptional regulation of gene expression, Aussois, France, March, 1997.
  17. Ann-Bin Shyu, Paul T. Loflin, Sheila Peng, Nianhua Xu, and Chyi-Ying A. Chen: The Tetracycline-Regulated transcriptional Pulse-Chase and ectopic expression: New Strategies for Studying AU-Rich Element-Mediated mRNA Turnover. The RNA Society Meeting on "RNA Structure and Function", Banff, Canada, June, 1997.
  18. Sheila Peng, Nianhua Xu, Chyi-Ying A. Chen, and Ann-Bin Shyu.: IN VIVO RNA STABILIZATION BY THE AU-RICH ELEMENT BINDING PROTEIN, HuR, AN ELAV PROTEIN THAT SHUTTLES BETWEEN NUCLEUS AND CYTOPLASM. European Science Foundation Conference on Molecular Biology of RNA: Translation, Stability, and Localization of mRNA, Giens, France. September, 1997.
  19. Ann-Bin Shyu, Paul T. Loflin, Sheila Peng, Nianhua Xu, and Chyi-Ying A. Chen: Control of cytokine gene expression by AU-rich element directed mRNA turnover. Symposium of the

- Sonderforschungsbereich (SFB) 244 on Mechanisms of Inflammation, Hannover, Germany, June, 1998.
20. Paul T. Loflin, Nianhua Xu, Chyi-Ying A. Chen, and Ann-Bin Shyu: MODULATION OF THE AU-RICH ELEMENT DIRECTED mRNA TURNOVER BY HEMIN INVOLVES AUF1/HNRNP D and HuR AND IS ERYTHROID CELL-SPECIFIC. Cold Spring Harbor Laboratory Meeting on "Translational Control", Cold Spring Harbor, New York, September, 1998.
  21. Paul T. Loflin, Chyi-Ying A. Chen, and Ann-Bin Shyu: Unraveling a cytoplasmic role for hnRNP D/AUF1 in the *in vivo* mRNA decay directed by the AU-rich element. RNA '99 meeting, the Annual meeting of RNA Society, Edinburgh, UK, June, 1999.
  22. Grosset, C, Chen, C.-Y. A., Xu, N., Sonenberg, N. and Shyu, A.-B. An active role for poly(A) tail in mRNA turnover: Control of *c-fos* mRNA decay by crosstalk between the poly(A) tail and the major coding determinant of instability. San Francisco Symposium '99 on "Translation and Stability of mRNA, San Francisco, CA, October, 1999.
  23. Grosset, C, Chen, C.-Y. A., Xu, N., Chang, T-C., Sonenberg, N. and Shyu, A.-B. A novel mechanism for translationally coupled mRNA turnover. Cold Spring Harbor Laboratory Meeting on "Translational Control", Cold Spring Harbor, New York, September, 2000.
  24. Xu, N., Chen, C.-Y. A., and Shyu, A.-B. Regulation of two distinct RNA destabilizing elements in the *c-fos* transcript by a common factor, hnRNP D. Cold Spring Harbor Laboratory Meeting on "Translational Control", Cold Spring Harbor, New York, September, 2000.
  25. Shyu, A.-B. Xu, N., and Chen, C.-Y. A. Control of cytoplasmic mRNA turnover by hnRNP D requires its association with target mRNAs in the nucleus. The RNA Society Meeting on "RNA Structure and Function", Banff, Canada, June, 2001.
  26. Durdan, S., Chen, C-Y. A., Chang, T-C, and Shyu, A-B. Evidence for the interaction between the coding determinant and poly(A) tail in translationally coupled *c-fos* mRNA decay. The RNA Society Meeting on "RNA Structure and Function", Madison, WI, June, 2002.
  27. Chen, C-Y A, Xu, N, and Shyu, A-B. New insights into both RNA-binding specificity and the functionally critical domains of HuR in mRNA stabilization. The RNA Society Meeting on "RNA Structure and Function", Madison, WI, June, 2002.
  28. Chen, C-Y A, Durdan, S., and Shyu, A-B. Deadenylation is a necessary first step in the decay of nonsense codon-containing mRNA in the cytoplasm. The RNA Society Meeting on "RNA Structure and Function", Madison, WI, June, 2002.
  29. Chang, T.-C., C-Y A. Chen, W. Zhu, N. Xu, S. Durdan, A. Kahvejian, N. Sonenberg, and A-B Shyu. Interactions between the coding region determinant and the poly(A) tail in translationally coupled *c-fos* mRNA decay. The RNA Society Meeting on "RNA Structure and Function", Vienna, Austria, June, 2003.
  30. Chen, C-Y A, Xu, N, and Shyu, A-B. Stabilization function of hnRNP D in cytoplasmic mRNA turnover depends on its ability to shuttle between the nucleus and the cytoplasm. The RNA Society Meeting on "RNA Structure and Function", Vienna, Austria, June, 2003.
  31. Chang, T-C., Yamashita, A., Chen, C-Y A, Zhu, W., Kalvejian, A., Sonenberg, N., and Shyu, A-B. New insights into the mechanism of translationally coupled mRNA decay directed by the *c-fos* coding determinant. The Ninth Annual RNA Society Meeting, Madison, WI, June, 2004.
  32. Yamashita, A, Chang, T-C., Yamashita, Y., Zhu, W., Zhong, Z., Chen C-Y. A., and Shyu, A-B. CCR4 and PAN2 poly(A) nucleases are both required for cytoplasmic deadenylation that triggers decay of normal and nonsense-containing mRNAs in mammalian cells. The Tenth Annual RNA Society Meeting, Banff, Canada, June, 2005.
  33. Chang, T-C., Yamashita, A., Yamashita, Y., Zheng, L., Zhu, W., Chen, C-Y A, and Shyu, A-B. Regulation of CCR4/CAF1 poly(A) nuclease complex-mediated deadenylation by the anti-

proliferative factor, TOB. The Cold Spring Harbor Meeting on Eukaryotic mRNA Processing, Cold Spring Harbor, NY, August, 2005.

34. Shyu, A-B. A potential link between deadenylation and RNA processing body. FASEB summer meeting on "Post-transcriptional Control of Gene Expression: Mechanisms of mRNA decay", Snowmass, CO, June, 2006.
35. Chang, T-C, Ezzeddine, N, Yamashita, A, Zhong, Z, Chen, C-Y A, and Shyu, A-B. Human TOB, an Anti-Proliferative Transcription Factor, Is a PABP-Dependent Positive Regulator of Cytoplasmic mRNA Deadenylation. The Twelve Annual RNA Society Meeting, Madison, Wisconsin, June, 2007.
36. Zheng, D, Ezzeddine, N, Zhu, W, Chen, C-Y A, and Shyu, A-B. A role of poly(A) nucleases in promoting P-body formation during mammalian mRNA turnover. The Twelve Annual RNA Society Meeting, Madison, Wisconsin, June, 2007.
37. Chen, C-Y A, Xia, Z, Zhai, Y, and Shyu, A-B. Mammalian MicroRNA-Induced Silencing Complex Coordinates Rapid Deadenylation and Decapping of Target mRNA through Argonaute Proteins In Vivo. The Fourteenth Annual RNA Society Meeting, Madison, Wisconsin, May, 2009.
38. Zheng, D, Chen, C-Y A, and Shyu, A-B. Pan3: More than An mRNA Poly(A) Nuclease Subunit. The Fourteenth Annual RNA Society Meeting, Madison, Wisconsin, May, 2009.
39. Zheng, D, Chen, C-Y A, and Shyu, A-B. Formation, Dynamics, Function, and Regulation of P-bodies in Mammalian Cells. The Fourth RNA Stability Meeting, Montreal, Quebec, Canada, October, 2010.
40. Chadee, A, Zheng, D, Chen, C-Y A, and Shyu, A-B. Differential Regulation of Deadenylation and P-body Dynamics by Two Isoforms of Pan3, a Regulatory Factor of Pan2 Deadenylase. The Sixteenth Annual RNA Society Meeting, Kyoto, Japan, June, 2011.
41. Chen, C-YA, Huang, K-L, Zhang, Y, and Shyu, A-B. Mechanisms and Regulation of Deadenylation-Dependent mRNA Decay Pathways. The 85<sup>th</sup> Annual Meeting of Japanese Biochemical Society, Fukuoka, Japan, December, 2012
42. Chen, C.-Y. A., Huang, K.-L., Zhang, Y., and Shyu, A.-B. Mechanisms for Global Regulation of MicroRNA-Mediated mRNA Decay. EMBO Conference on "Eukaryotic RNA Turnover: from Structural Insights to Diseases", Strasbourg, France, April 2013.
43. Shyu, A.-B. and Chen, C.-Y. A. Transcriptome-wide Regulation of mRNA Turnover in Mammalian Cells. The 6<sup>th</sup> Workshop of the Bordeaux RNA Club, Bordeaux, France, June, 2014.
44. Shyu, A.-B. and Chen, C.-Y. A. Global regulation of mammalian mRNA turnover. FASEB Science Research Conference on "Post-transcriptional Control of Gene Expression: Mechanism of mRNA Decay", Big Sky, MT., July, 2014.
45. Shyu, A.-B. and Chen, C.-Y. A. Regulatory roles of deadenylation factors in controlling mRNA turnover across the transcriptome. FASEB Science Research Conference on "Post-Transcriptional Control of Gene Expression: mRNA Decay", Lisbon, Portugal, July 2016.

#### B. Refereed Articles in Journals:

1. Shyu, A.-B., Raff, R. A., and Blumenthal, T.: Expression of the vitellogenin gene in female and male sea urchin. **Proc. Natl. Acad. Sci. USA** 83:3865-3869, 1986.
2. Shyu, A.-B., Blumenthal, T., and Raff, R. A.: A single gene encoding vitellogenin in the sea urchin *Strongylocentrotus purpuratus*: sequence at the 5' end. **Nucleic Acids Res.** 15:10405-10417, 1987.
3. Shyu, A.-B., Greenberg, M. E., and Belasco, J. G.: The *c-fos* transcript is targeted for rapid decay by two distinct mRNA degradation pathways. **Genes & Development** 3:60-72, 1989.

4. Belasco, J. G., Shyu, A.-B., and Greenberg, M. E.: Rapid degradation of the *c-fos* proto-oncogene transcript. in *Post-transcriptional Control of Gene Expression*. McCarthy, JEG and Tuite, MF, eds. Springer-Verlag, 65-71, 1990.
5. Greenberg, M.E., Shyu, A.-B., and Belasco, J.G.: Deadenylation: a mechanism controlling *c-fos* mRNA decay. **Enzyme** 44:181-192,1990.
6. Shyu, A.-B., Belasco, J. G., and Greenberg, M. E.: Two distinct destabilizing elements in the *c-fos* message trigger deadenylation as a first step in rapid mRNA decay. **Genes & Development** 5:221-231, 1991.
7. Shyu, A.-B., Chen, C.-Y. A., You, Y. Identification of cellular proteins that bind specifically to the AU-rich destabilizing element in the 3' untranslated region of *c-fos* messenger RNA. **FASEB J** 6: A491, 1992.
8. You, Y., Chen, C.-Y. A., and Shyu, A.-B.: U-rich sequence binding proteins (URBPs) interacting with a 20-nucleotide U-rich sequence in the 3' untranslated region of *c-fos* mRNA may be involved in the first step of *c-fos* mRNA degradation. **Mol. Cell. Biol.** 12: 2931-2940, 1992.
9. Chen, C.-Y. A., You, Y., and Shyu, A.-B.: Two Cellular Proteins Bind Specifically to a Purine-Rich Sequence Necessary for the Destabilization Function of a *c-fos* Protein Coding Region Determinant of mRNA Instability. **Mol. Cell. Biol.** 12: 5748-5757, 1992.
10. Chen, A. C.-Y., Chen, T.-M., Shyu, A.-B.: Interplay of two functionally and structurally distinct domains of the *c-fos* AU-rich element specifies its mRNA destabilizing function. **Mol. Cell. Biol.** 14: 416-426, 1994.
11. Schiavi, S. C., Wellington, C. L., Shyu, A.-B., Chen, C.-Y. A., Greenberg, M. E., and Belasco, J. G.: Multiple elements in the *c-fos* protein-coding region accelerate mRNA deadenylation and decay by a mechanism coupled to translation. **J. Biol. Chem.** 269: 3441-3448, 1994.
12. Chen, C.-Y. A. and Shyu, A.-B.: Selective degradation of early-response-gene mRNAs: Functional analyses of sequence features of the AU-rich elements. **Mol. Cell. Biol.** 14: 8471-8482, 1994.
13. Chen, C.-Y. A., Xu, N., and Shyu, A.-B.: mRNA decay mediated by two distinct AU-rich elements from the *c-fos* and GM-CSF transcripts: Different deadenylation kinetics and uncoupling from translation. **Mol. Cell. Biol.** 15: 5777-5788, 1995.
14. Chen, C.-Y. A. and Shyu, A.-B. : AU-rich elements: Characterization and importance in mRNA degradation. **Trends Biochem. Sci.** 20: 465-470, 1995.
15. Peng, S., Chen, C.-Y. A., and Shyu, A.-B. : Functional characterization of a non-AUUUA AU-rich element from the *c-jun* protooncogene: Evidence for the existence of distinct class of AU-rich element. **Mol. Cell. Biol.** 16: 1490-1499, 1996.
16. Xu, N., Chen, C.-Y. A., and Shyu, A.-B. : Modulation of the fate of cytoplasmic mRNA by AU-rich elements: Key sequence features controlling mRNA deadenylation and decay. **Mol. Cell. Biol.** 17: 4611-4621, 1997
17. Xu, N., Chen, C.-Y. A., and Shyu, A.-B. : The tetracycline-regulated transcriptional pulse-chase: a new strategy for studying ARE-mediated mRNA decay. **Nucl. Acid. Res.** 26 (2): 558-565, 1998.
18. Peng, S., Chen, C.-Y. A., Xu, N., and Shyu, A.-B. : RNA stabilization by the AU-rich element binding protein, HuR, an ELAV protein. **EMBO J.** 17: 3461-3470, 1998.
19. Loflin, P. T., Chen, C.-Y. A., Xu, N., and Shyu, A.-B. :Transcriptional pulsing approaches for analysis of mRNA turnover in mammalian cells. **Methods (A Companion to Methods in Enzymology)** 17: 11-20, 1999.
20. Winzen, R., Kracht, M., Ritter, B., Wilhelm, A., Chen, C.-Y. A., Shyu, A.-B., Muller, M., Gaestel, M., Resch, K., and Holtmann, H. : The p38 MAP kinase pathway signals for cytokine-induced mRNA stabilization via MAP kinase-activated protein kinase 2 and an AU-rich region-targeted mechanism, **EMBO J.** 18: 4969-4980, 1999.

21. Loflin, P. T., Chen, C.-Y. A., and Shyu, A.-B. :Unraveling a cytoplasmic role for hnRNP D/AUF1 in the *in vivo* mRNA decay directed by the AU-rich element. **Genes & Dev.** 13: 1884-1897, 1999.
22. Shyu, A.-B. and Wilkinson, M. The double lives of shuttling RNA-binding proteins. **Cell** 102: 135-138, 2000.
23. Grosset, C, Chen, C.-Y. A., Xu, N., Jacquemin-Sablon, H., Sonenberg, N. and Shyu, A.-B. A mechanism for translationally-coupled mRNA turnover: interaction between the poly(A) tail and an RNA stability determinant in the c-fos coding region via a novel protein complex. **Cell** 103: 29-40, 2000.
24. Xu, N., Chen, C.-Y. A., and Shyu, A.-B. A versatile role for hnRNP D isoforms in the differential regulation of cytoplasmic mRNA turnover. **Mol. Cell. Biol.** 21: 6960-6971, 2001.
25. Wilkinson, M. F. and Shyu, A.-B. Bifunctional regulatory proteins that control gene expression in both the nucleus and the cytoplasm. **BioEssay** 23:775-787, 2001.
26. Chen, C.-Y. A., Xu, N., and Shyu, A.-B. Highly Selective Actions of HuR in Antagonizing AU-Rich Element-Mediated mRNA Destabilization. **Mol. Cell. Biol.** 22: 7268-7278, 2002.
27. Wilkinson, M. F. and Shyu, A.-B. "RNA surveillance by nuclear scanning?" **Nature Cell Biol.** 4: E144-E147, 2002.
28. Chen, C.-Y. A. and Shyu, A.-B. Rapid Deadenylation Triggered by Nonsense Codon Precedes Decay of the RNA Body in a Mammalian Cytoplasmic Nonsense-Mediated-Decay Pathway. **Mol. Cell. Biol.** 23: 4805-4813, 2003.
29. Atasoy, U., Curry, S.L., de Silanes, I.L., Shyu, A.-B., Casolaro, V., Gorospe, M., and Stellato, C. Regulation of eotaxin gene expression by TNF $\alpha$  and IL-4 through messenger RNA stabilization. **J Immunology.** 171:4369-4378, 2003.
30. Chen, C.-Y. A., Xu, N., Zhu, W., and Shyu, A.-B. Functional Dissection of hnRNP D Suggests that Nuclear Import Is Necessary Before hnRNP D Can Modulate mRNA Turnover in the Cytoplasm.. **RNA.** 10:669-680, 2004.
31. Chang, T.-C., Yamashita, A., Chen, C.-Y. A., Yamashita, Y., Zhu, W., Durdan, S., Kahvejian, A., Sonenberg, S., and Shyu, A.-B. UNR, a new partner of poly(A)-binding protein, plays a key role in translationally coupled mRNA turnover mediated by the c-fos major coding-region determinant. **Genes & Dev.** 18: 2010-2023, 2004.  
(\*Selected for Journal Research Highlights in Nature Structural and Molecular Biology, 11:811, 2004.)
32. Yamashita, A., Chang, T.-C., Yamashita, Y., Zhong, Z., Zhu, W., Chen, C.-Y. A., and Shyu, A.-B. Concerted action of poly(A) nucleases and decapping enzyme in mammalian mRNA turnover. **Nature Struct & Mol. Biol.** 12:1054-1063, 2005.  
(\*Featured in News & Views by the Journal, see pp. 1024-25)
33. Shyu, A.-B. UNRaveling the regulation of dosage compensation. **Nature Struct & Mol Biol.** 13:189-190, 2006.
34. Lim, N.S., Kozlov, G, Chang, T.-C., Groover, O., Siddiqui, N., Volpon, L., De Crescenzo, G., Shyu, A.-B., Gehring, K. Comparative peptide-binding studies of PABC domains from the E3 ubiquitin ligase HYD and poly(A)-binding protein: Implications for HYD function. **J Biol Chem.** 281: 14376-82, 2006.
35. Siddiqui, N., Mangus, D.A., Chang, T.-C., Palermino, J.-M., Shyu, A.-B., and Gehring, K. Poly(A)-nuclease interacts with the PABC domain from poly(A)-binding protein. **J Biol Chem.** 282: 25067-75, 2007.
36. Chen, C.-Y. A., Yamashita, Y, Chang, T.-C., Yamashita, A., Zhu, W., Zhong, Z., and Shyu, A.-B. Versatile applications of transcriptional pulsing to study of mRNA turnover in mammalian cells. **RNA.** 13: 1775-86, 2007.
37. Ezzeddine, N., Chang, T.-C., Yamashita, A., Chen, C.-Y. A., Zhu, W., Zhong, Z., Yamashita, Y.,

- Zheng, D., and Shyu, A.-B. Human TOB, an anti-proliferative transcription factor, is a PABP-dependent positive regulator of cytoplasmic mRNA deadenylation. **Mol Cell Biol.** 27: 7791-7801, 2007.
38. Shyu, A.-B., Wilkinson, M. F., and van Hoof, A. mRNA regulation: To translate or to degrade. **EMBO J.** 27: 471-481, 2008.
  39. Chen, C.-Y. A., Ezzeddine, N. and Shyu, A.-B. : Messenger RNA half-life measurements in mammalian cells. **Methods Enzymol.** 448:335-357, 2008.
  40. Zheng, D., Ezzeddine, N., Chen, C.-Y. A., Zhu, W., He, X., Shyu, A.-B. Deadenylation is prerequisite for P-body formation and mRNA decay in mammalian cells. **J Cell Biol.** 182: 89-101, 2008.
  41. Martineau, Y., Derry, M. C., Wang, X., Yanagiya, A., Berlanga, J. J., Shyu, A.-B., Imataka, H., Gehring, K., Sonenberg, N. Poly(A)-binding protein-interacting protein 1 binds to eukaryotic translation initiation factor 3 to stimulate translation. **Mol Cell Biol.** 28:6658-6667, 2008.
  42. Zhai, Y., Zhong, Z., Chen, C.-Y. A., Xia, Z., Song, L., Blackburn, M. R., and Shyu, A.-B. Coordinated changes in mRNA turnover, translation, and RNA processing bodies in bronchial epithelial cells following inflammatory stimulation. **Mol Cell Biol.** 28: 7414-7426, 2008.
  43. Fabian, M.R., Mathonnet, G., Sundermeier, T., Mathys, H., Zipprich, J. T., Svitkin, Y.V., Rivas, F., Jenik, M., Wohlschlegel, J., Doudna, J. A., Chen, C.-Y. A., Shyu, A.-B., Yates III, J. R., Hannon, G. J., Filipowicz, W., Duchaine, T. F., Sonenberg, N. Mammalian miRNA RISC recruits CAF1 and PABP to affect PABP-dependent deadenylation. **Mol Cell.** 35:868-880, 2009.
  44. Chen, C.-Y. A., Zheng, D., Xia, Z., and Shyu, A.-B. Ago-TNRC6 complex triggers microRNA-mediated mRNA decay by promoting biphasic deadenylation followed by decapping. **Nature Struct & Mol Biol.** 16: 1160-1166, 2009.
  45. Mauxion, F., Chen, C.-Y. A., Seraphin, B., and Shyu, A.-B. BTG/Tob factors impact deadenylases. **Trends Biochem Sci.** 34: 640-647, 2009.
  46. Chen, C-Y A and Shyu, A.-B. HuD Stimulates Translation via eIF4A. **Mol Cell.** 36: 920-921, 2009.
  47. Zheng, D., Chen, C.-Y. A., Shyu, A.-B. Unraveling regulation and new components of human P-bodies through a protein interaction framework and experimental validation. **RNA**, 17:1619-34, 2011.
  48. Chen, F., Shyu, A.-B., Shneider, BL. Hu antigen R and tristetraprolin: Counter-regulators of rat apical sodium-dependent bile acid transporter by way of effects on messenger RNA stability. **Hepatology**, 54:1371-8, 2011.
  49. Chen, C.-Y. A., Shyu, A.-B. Mechanisms of deadenylation-dependent decay. **Wiley Interdiscip Rev RNA**, 2:167-83, 2011.
  50. Jones, K., Jin, B., Iakova, P., Huichalaf, C., Sarkar, P., Schneider-Gold, C., Schoser, B., Meola, G., Shyu, A.-B., Timchenko, N., Timchenko, L. RNA Foci, CUGBP1, and ZNF9 Are the Primary Targets of the Mutant CUG and CCUG Repeats Expanded in Myotonic Dystrophies Type 1 and Type 2. **Am J Pathol**, 179: 2475-89. 2011.
  51. Ezzeddine N., Chen C.-Y. A., Shyu A.-B. Evidence providing new insights into TOB-promoted deadenylation and supporting a link between TOB's deadenylation-enhancing and antiproliferative activities. **Mol Cell Biol.** 32: 1089-98, 2012.
  52. Abe, K., Ishigami, T., Shyu, A.-B., Ohno, S., Umemura, S., and Yamashita, A. Analysis of interferon-beta mRNA stability control after poly(I:C) stimulation using RNA metabolic labeling by ethynyluridine. **Biochem Biophys Res Commun.**, 428: 44-49, 2012.
  53. Huang, K.-L., Chadee, A. B., Chen, C.-Y. A., Zhang, Y, and Shyu, A.-B. Phosphorylation at intrinsically disordered regions of PAM2 motif-containing proteins modulates their interactions with PABPC1 and influences mRNA fate. **RNA**, 19:295-305, 2013.



54. Chen, C.-Y. A. and Shyu, A.-B. Protein segregase meddles in remodeling of mRNA-protein complexes. **Genes Dev.** 27:980-984, 2013.
55. Masamha, C. P., Xia, Z., Yang, J., Albrecht, T. R., Li, M., Shyu<sup>#</sup>, A.-B., Li<sup>#</sup>, W., and Wagner<sup>#</sup>, E. J. CFIm25 links Alternative Polyadenylation to Glioblastoma Tumor Suppression. **Nature**, 509: 412-6, 2014. (<sup>#</sup>: co-corresponding authors)
56. Chen, C.-Y. A. and Shyu, A.-B. Emerging mechanisms of mRNP remodeling regulation. **Wiley Interdisciplinary Reviews (WIREs) RNA**, 5: 713-722, 2014.
57. Yoshikawa, T., Wu, J., Otsuka, M., Kishikawa, T., Ohno, M., Shibata, C., Takata, A., Han, F., Kang, Y.J., Chen, C.-Y. A., Shyu, A.-B., Han, J., and Koike, K. ROCK inhibition enhances microRNA function by promoting deadenylation of targeted mRNAs via increasing PAIP2 expression. **Nucleic Acids Research**, 43: 7577-89, 2015.
58. Shyu, A.-B. Study of mRNA turnover never decays. **RNA**, 21: 738-9, 2015.
59. Chen, C.-Y. A., Chang, J. T., Ho, Y.-F., and Shyu, A.-B. MiR-26 down-regulates TNF- $\alpha$ /NF- $\kappa$ B signaling and IL-6 expression by silencing HMGA1 and MALT1. **Nucleic Acids Research**, 44: 3772-87, 2016.
60. Masamha, C. P., Xia, Z., Peart, N., Collum, S., Li, W., Wagner, E. J., and Shyu, A.-B. CFIm25 regulates glutaminase alternative terminal exon definition to modulate miR-23 function. **RNA**, 22: 830-8, 2016.
61. Chen, C.-Y. A. and Shyu, A.-B. Emerging themes in regulation of global mRNA turnover in *cis*. **Trends in Biochemical Sciences**, 42:16-27, 2017.
62. Chen, C.-Y. A., Zhang, Y., Xiang, Y., Han, L., and Shyu, A.-B. Antagonistic actions of two human Pan3 isoforms on global mRNA turnover. **RNA**, 23:1404-1418, 2017.
63. Xiang, Y., Ye, Y., Lou, Y., . . . . ., Shyu, A.-B., Mills, G. B., Han, L. Comprehensive characterization of alternative polyadenylation in human cancer. **JNCI**, 110:379-389, 2017.
64. Park, H. J., Ji, P., Kim, S., Xia, Z., Rodriguez, B., Li, L., Su, J., Chen, K., Masamha, C. P., Bailat, D., Fontes-Garfias, C. R. , Shyu, A.-B., Neilson, J. R., Wagner, E. J., Li, W. 3'-UTR shortening represses tumor-suppressor genes in trans by disrupting ceRNA crosstalk. **Nature Genetics**, 50:783-789, 2018.
65. Chen, C.-Y. A., Strouz, K., Huang, K.-L., and Shyu, A.-B. Tob2 phosphorylation regulates global mRNA turnover to reshape transcriptome and impact cell proliferation. **RNA**, 26:1143-59, 2020.
66. Chen, C.-Y. A., Strouz, K., and Shyu, A.-B. Presence of m<sup>6</sup>A near the stop codon elicits YTHDF2-dependent stabilization of marked mRNAs and destabilization of unmethylated isoforms (under review), 2021.

***(Note that as of October 11, 2021, my publications have been cited 15,078 times collectively according to Google Scholar.)***

C. Book Chapters:

1. Shyu, A.-B., Garcia-Sanz, J. A., and Mullner, E. : Analysis of mRNA decay in mammalian cells. in *The Immunology Methods Manual*, I. Lefkovits, ed. Academic Press, London, 1996.
2. Shyu, A.-B.: AU-Rich Elements Entry. in *The Encyclopedia of Molecular Medicine*, T. E. Creighton, ed. John Wiley & Sons, Inc., New York, pp 299-302, 2001.
3. Shyu, A. B., and Chen, C.-Y. A. Regulation of mRNA turnover. in *Handbook of Cell Signaling*, R. A. Bradshaw and E. A. Dennis (eds.), 2nd ed. Elsevier, San Diego, 2009
4. Chen, C.-Y. A., Shyu, A.-B. (2012). Deadenylation and P-bodies. In E.K.L. Chan and M.J. Fritzler (eds.), *Ten Years of Progress in GW/P Body Research (Chapter 11)*, Advances in Experimental Medicine and Biology 768, DOI 10.1007/978-1-4614-5107-5\_11. New York: Springer.