## **CURRICULUM VITAE**

September, 2017

NAME: Seung-Hee Yoo, Ph.D.

**PRESENT TITLE:** Assistant Professor, tenure-track

WORK ADDRESS: Department of Biochemistry and Molecular Biology UT Health Science McGovern Medical School 6431 Fannin Street, MSB 6.200 Houston, TX 77030 Phone: (847) 769-8231 mobile (713) 500-6136 office Fax: (713) 500-0652 E-mail: seung-hee.yoo@uth.tmc.edu

**CITIZENSHIP:** South Korea (US permanent resident)

#### **UNDERGRADUATE EDUCATION:**

1990-1994 Ewha Women's University, South Korea B.S. in Biological Sciences.

#### **GRADUATE EDUCATION:**

1995-1997	KAIST, South Korea M.S. in Biological Sciences.
1998-2004	KAIST, South Korea Ph.D. in Biological Sciences.

#### **POSTGRADUATE TRAINING:**

1998. 11 – 2001.4 and 2002.3 – 2003. 8	
	Visiting graduate student,
	Northwestern University, Chicago.
2005. 3 – 2006. 3	Post-doctoral fellow in Florida State Univ.
2006. 9 – 2008. 3	Post-doctoral fellow in Northwestern Univ.

### ACADEMIC AND ADMINISTRATIVE APPOINTMENTS:

2009. 4 – 2013. 4	Instructor in UTSW Medical Center Department of
	Neuroscience
2013. 4 – 2015. 3	Research assistant professor
	UT Health Science Center at Houston.

2015. 4 – Present	Tenure-track assistant professor
	UT Health Science McGovern Medical School
2015-present	Regular member, University of Texas,
	Graduate School of Biomedical Sciences at Houston.

# **PROFESSIONAL ORGANIZATIONS (AND COMMITTEES OF THESE):**

# LOCAL:

2012-present	Texas Medical Center Digestive Diseases Center
2013-2015	UTMS Circadian Clock Club (as co-organizer).

#### **REGIONAL:**

2009-present	SouthEastern and Central Texas Society for Clocks (SECTS)
-	Served as co-organizer for 2014 SECTS meeting at UTHealth

### NATIONAL:

2009-present	Society for Research on Biological Rhythms (SRBR)
	Serving on the 2016 SRBR Program and Abstract Committees
2011-present	American Heart Association

#### HONORS AND AWARDS:

1995 - 2004	Korean Government Scholarship for graduate student
1998 -1999	Biomedical Research Center Scholarship for graduate student
	exchange program
2005 -2006	Brain Korea Scholarship for postdoctoral fellowship
2014 -2015	Pilot/Feasibility Award, TMC Digestive Diseases Center (DDC)

#### EDITORIAL POSITIONS: N/A.

SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES: N/A.

SERVICE ON THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON COMMITTEES: N/A

# SERVICE ON THE UNIVERSITY OF TEXAS MEDICAL SCHOOL AT HOUSTON COMMITTEES:

2016 - present: McGovern Faculty Senate.

# SERVICE ON GRADUATE SCHOOL COMMITTEES:

2015-2017: Advisory Committee, Gabrielle Gloston (Chen and Yoo lab), as cochair.

2017-present: Advisory Committee, Jiah Yang.

## SERVICE ON UTMSH AFFILIATED HOSPITAL COMMITTEES: N/A

### **SERVICE TO THE COMMUNITY:**

2013-present: manuscript reviewer for the following journals: *PNAS Scientific Reports Genome Research PLoSOne Journal of Biological Rhythms* 

2013: Co-organizer for the 2014 Texas SECTS clock research meeting.
2015-present: hosting seminar speakers at least twice a year.
2015-present: co-organizer for TMC Korean Woman Scientist Forum.
2016: Abstract Committee and Slide Session Chair for 2016 SRBR Conference.
2017: Co-organizer for the Texas TSCBM clock research meeting.

# SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:

2015-2017: Gabrielle Gloston (GSBS Ph.D. Program). 2017: Xiaojie Yang (GSBS Ph.D. Program). 2017: Jiah Yang (GSBS Ph.D. Program).

### SPONSORSHIP OF POSTDOCTORAL FELLOWS:

2014-2015: Kwon Jeong. *First author on one publication.*2015: Chang Ho Yu (joint recruitment with Dr. Chen).
2015: Jeehwan Choe (joint recruitment with Dr. Chen).
2016: Yoonjin Kim (joint recruitment with Dr. Chen).

# SPONSORSHIP OF MEDICAL STUDENTS:

2014: Lei "Peter" Jin (medical graduate). 2015: Steven Lee (UTHealth MS) 2017: Brian Lam

# SPONSORSHIP OF UNDERGRADUATE/HIGH SCHOOL STUDENTS:

2013: Christopher A. Ayoub (Oberlin College) 2013: Brian Ji (UIUC) 2014: Youngmin Shin, Korea (Soogsil University, Seoul, Korea).
2015: Seonghwa Kim, Korea (Chungnam National University, Korea).
2015: Fatma Ozguc (UC Berkeley)
2015: Jihwan Park (Memorial HS, Houston; joint sponsorship with Dr. Yoo)
2015: Michael Jin (U. Houston; joint sponsorship with Dr. Yoo)
2015: Osvaldo Alquicira (U. Houston, bio major, graduated 2015)
2016: Perry Lee (U. Houston, bio major)
2017: Sally Yan, Sajiv Saksena

# **CURRENT TEACHING RESPONSIBILITIES:**

2016-present: GSBS Current Methods, High Throughput Chemical Screen. 2017: 2017 Fall GSBS Scientific Writing.

### **MENTORING ACTIVITIES:**

2013-2015: Kazunari Nohara.

Instructor jointly supported with Dr. Chen, published three first authors papers, another in preparation.

2016: Jeehwan Choe. *Postdoc.* 2016: Yoonjin Kim. *Postdoc.* 

### **CURRENT GRANT SUPPORT:**

Agency: NIH/NIA. Project: R01 AG045828 (RFA-AG-13-007) Title: Role of clock-modulating small molecules against aging. Role: Co-I. (PI: Zheng Chen) Award period and amount: 08/01/2013 – 05/31/2018. \$175,289/yr direct cost. 15% salary support. Total: \$1,160,000.

Agency: NIH/NIGMS.

**Project:** R01 GM114424

**Title:** Function and regulation of the circadian factor Period2.

Role: Pl.

Award period and amount: 4/01/2015 – 03/31/2020.

Total: \$1,482,250. 35% salary support.

Agency: NIH/NIGMS.

**Project:** Equipment supplement 3R01GM114424-03S1 for R01 GM114424 **Title:** Function and regulation of the circadian factor Period2. **Role:** PI.

Award period and amount: 04/01/2017 – 03/31/2018.

Total: \$100,000

Agency: Elysium Health, Inc. Project ID: Sponsored Research Agreement. Title: Function of CRY and FAD in nutrient sensing. Role: PI Award period and amount: 8/01/2017 – 7/31/2019. Total: \$400,000

# PENDING GRANT SUPPORT:

### Agency: CPRIT.

Project ID: Individual Investigator Research Award.
Title: Anti-cancer mechanisms of the ROR-Nobiletin axis.
Role: Co-I (PI: Chen), 15% effort.
Award period: 03/01/2018 – 02/28/2021.
\$900,000 total cost.
Pending review.

# PAST GRANT SUPPORT:

Agency: Matsutani America and Matsutani Labs.
Project ID: Sponsored Laboratory Testing Agreement.
Title: Anti-diabetic role of Fibersol-2 in mouse Type 2 Diabetes models & Anti-inflammatory and prebiotic roles of Fibersol-2.
Role: Co-I.
Award period and amount: 8/09/2012 – 12/31/2014. 10% salary support. \$229,552 direct cost, \$68,866 indirect cost. Total: \$298,418.
Agency: Texas Medical Center Digestive Diseases Center.
Project: 2014 Pilot/Feasibility Award.
Title: Altered gut microbiota and GI physiology in circadian clock deficient mice.
Role: Pl.
Award period and amount: 03/01/2014 – 02/28/2015. \$25,000 direct cost. Total: \$25,000.
A. Abstracts (since 2009)

2012: 13th biannual Society for Research on Biological Rhythms, FL. "Small molecular probes of the circadian clock and output functions".

2013: First Annual Texas SACT conference. "Competing E3 ubiquitin ligases govern circadian periodicity by degradation of CRY in nucleus and cytoplasm".

2013: AHA Scientific Sessions, Dallas. "Identification of clock-modulating small molecules with protective roles against the metabolic syndrome".

2014: 9<sup>th</sup> Annual Chicago Diabetes Day, Chicago. "Gut microbiota confer a protective role of Fibersol-2 against metabolic syndrome". One of eight poster awards.

2014: Keystone symposium on microbiome, Big Sky, Montana. "A key role of gut microbiota in mediating protection against metabolic syndrome by Fibersol-2".

2014: ADA Scientific Sessions, San Francisco. "Gut microbiota confer a protective role of Fibersol-2 against metabolic syndrome". Selected for audio guided tour.

2015: BMB program retreat. "Autophagy regulates the circadian clock by inhibiting CLOCK-mediated BMAL1 degradation".

2015: BMB program retreat. "Ammonia-lowering activities and CPS1 induction mechanism of a natural flavonoid".

2015: AHA Scientific Sessions, Orlando. "Genetic and Pharmacological Regulation of Circadian Energy Metabolism".

# B. Refereed Original Articles in Journals

- Xiang, Y., Ye, Y., Lou, Y., Yang, Y., Ozguc, F.M., Diao, L., Karmouty-Quintana, H., Xia, Y., Blackburn, M., Kellems, R., Chen, Z., **Yoo, S.H**., Shyu, A.-B., Mills, G.B., L. Han. Comprehensive characterization of alternative polyadenylation in human cancer. Accepted (*JNCI*).
- Zhu, W., Krishna, S., Garcia, C., Lin C.C., Scott, K., Mohila, C.A., Creighton, C.J., Yoo, S.H., Lee H.K., Deneen, B.,Daam2 Driven Degradation of VHL Promotes Gliomagenesis. Accepted (*eLife*)
- 3. Hughes, M.E., .... Yoo S.H., .... Hogenesch, J.B. Guidelines for genome-scale analysis of biological rhythms. *J. Biological Rhythms*, in press.
- Yoo, S.H.\*, Kojima, S., Shimomura, K., Koike, N., Buhr, E., Furukawa, T., Ko, C., Gloston, G., Ayoub, C., Nohara, K., Reyes, B., Tsuchiya, Y., Yoo, O.-J., Yagita, K., Lee, C., Chen, Z., Yamazaki, S., Green, C.B., and Takahashi, J.S.: Period2 3'-UTR and microRNA-24 regulate circadian rhythms by repressing PERIOD2 protein accumulation. *Proc. Natl. Acad. Sci. USA*, in press. (\*: corresponding authors)
- Jung HY, Lee D, Ryu HG, Choi BH, Go Y, Lee N, Lee D, Son HG, Jeon J, Kim SH, Yoon JH, Park SM, Lee SV, Lee IK, Choi KY, Ryu SH, Nohara K, Yoo S.H, Chen Z, Kim KT. Myricetin improves endurance capacity and mitochondrial density by activating SIRT1 and PGC-1α. *Sci Rep.* 2017 Jul 24;7(1):6237. doi: 10.1038/s41598-017-05303-2.
- Nohara K., Chen, Z., Yoo S.H. A filtration-based method of preparing high-quality nuclei from cross-linked skeletal muscle for chromatin immunoprecipitation. *J Vis Exp.* 2017 Jul 6;(125). doi: 10.3791/56013.

- He, B., Nohara, K., Park, N., Park, Y.S., Guillory, B., Zhao, Z., Garcia, J.M., Koike, N., Lee, C.C., Takahashi, J.S., **Yoo S.H.**, and Chen, Z. The small molecule Nobiletin targets the molecular oscillator to enhance circadian rhythms and protect against metabolic syndrome. *Cell Metabolism* 23: 610-21, 2016.
- Lee E., Cho E., Kang D.H., Jeong E.H., Chen Z, Yoo S.H., and Kim, E.Y. Pacemaker-neuron-dependent disturbance of the molecular clockwork by a Drosophila CLOCK mutant homologous to the mouse CLOCKΔ19. *Proc. Natl. Acad. Sci. USA*, 113 (33) E4904-E4913, 2016.
- Jeong K, He B, Nohara K, Park N, Shin Y, Kim S, Shimomura K, Koike N, Yoo SH, Chen Z. Dual attenuation of proteasomal and autophagic BMAL1 degradation in *Clock*Δ19/+ mice improved glucose homeostasis. *Sci Rep.* 2015 July 31;5:12801
- Nohara K, Shin Y, Park N, Jeong K, He B, Koike N, Yoo SH, Chen Z. Ammonialowering activities and carbamoyl phosphate synthetase 1 (Cps1) induction mechanism of a natural flavonoid. *Nutr Metab* (Lond). 2015 Jun 9;12:23. doi: 10.1186/s12986-015-0020-7
- 11. He B, Nohara K, Ajami NJ, Michalek RD, Tian X, Wong M, Losee-Olson, SH, Petrosino JF, **Yoo SH**, Shimomura K, and Chen Z. Transmissible microbial and metabolomic remodeling by soluble dietary fiber improves metabolic homeostasis. *Sci Rep.* 2015 Jun 4;5:10604
- Umemura Y, Koike N, Matsumoto T, Yoo SH, Chen Z, Yasuhara N, Takahashi JS, and Yagita K. Transcriptional Program of Kpna2/Importin-α2 Regulates Cellular Differentiation-Coupled Circadian Clock Development in Mammalian Cells. *Proc. Natl. Acad. Sci. USA* 111:E5039-48, 2014.
- 13. Nam HJ, Boo K, Kim D, Han DH, Choe HK, Kim CR, Sun W, Kim H, Kim K, Lee H, Metzger E, Schuele R, Yoo SH, Takahashi JS, Cho S, Son GH, Baek SH. Phosphorylation of LSD1 by PCKα is crucial for circadian rhythmicity and phase resetting. *Mol Cell.* 2014 Mar 6;53(5):791-805.
- 14. Kumar V, Kim K, Joseph C, Kourrich S, Yoo SH, Huang HC, Vitaterna MH, de Villena FP, Churchill G, Bonci A, Takahashi JS. C57BL/6N mutation in cytoplasmic FMRP interacting protein 2 regulates cocaine response. *Science.* 2013 Dec 20;342(6165):1508-1512.
- 15.Gao P, Yoo SH, Lee KJ, Rosensweig C, Takahashi JS, Chen BP, Green CB. Phosphorylation of the cryptochrome 1 C-terminal tail regulates circadian period length. J Biol Chem. 2013 Dec 6;288(49):35277-3527786.
- Lee KH, Kim SH, Lee HR, Kim W, Kim DY, Shin JC, Yoo SH, Kim KT. MicroRNA-185 oscillation controls circadian amplitude of mouse Cryptochrome 1 via translational regulation. *Mol Biol Cell.* 2013 Jul;24(14):2248-2255.
- 17. Yoo SH, Mohawk JA, Siepka SM, Shan Y, Huh SK, Hong HK, Kornblum I, Kumar V, Koike N, Xu M, Nussbaum J, Liu X, Chen Z, Chen ZJ, Green CB, Takahashi JS. Competing E3 ubiquitin ligases govern circadian periodicity by degradation of CRY in nucleus and cytoplasm. *Cell* 2013, Feb 28; 152(5):1091-1105.\* *Cover article*
- 18. Shimomura K, Kumar V, Koike N, Kim TK, Chong J, Buhr ED, Whiteley AR, Low SS, Omura C, Fenner D, Owens JR, Richards M, **Yoo SH,** Hong HK, Vitaterna MH, Bass J, Pletcher MT, Wiltshire T, Hogenesch JB, Lowrey PL, & Takahashi JS.

*Usf1*, a suppressor of the circadian *Clock* mutant, reveals the nature of the DNAbinding of the CLOCK:BMAL1 complex in mice. *eLife* 2013;2:e00426

- 19. Koike N, **Yoo SH**, Huang HC, Kumar V, Lee C, Kim TK, Takahashi JS. Transcriptional architecture and chromatin landscape of the core circadian clock in mammals. *Science.* 2012 Oct 19;338(6105):349-54.
- 20. Huang N, Chelliah Y, Shan Y, Taylor CA, **Yoo SH**, Partch C, Green CB, Zhang H, Takahashi JS. Crystal structure of the heterodimeric CLOCK:BMAL1 transcriptional activator complex. *Science.* 2012 Jul 13;337(6091):189-94.
- 21. Solt LA, Wang Y, Banerjee S, Hughes T, Kojetin DJ, Lundasen T, Shin Y, Liu J, Cameron MD, Noel R, **Yoo SH**, Takahashi JS, Butler AA, Kamenecka TM, Burris TP. Regulation of circadian behaviour and metabolism by synthetic REV-ERB agonists, *Nature.* 2012 Mar 29;485(7396):62-8.
- 22. Chen Z, Yoo SH, Park YS, Kim KH, Wei S, Buhr E, Ye ZY, Pan HL, Takahashi JS. Identification of diverse modulators of central and peripheral circadian clocks by high-throughput chemical screening. *Proc Natl Acad Sci U S A.* 2012 Jan3;109(1):101-6.
- 23. Buhr ED, **Yoo SH**, Takahashi JS. Temperature as a universal resetting cue for mammalian circadian oscillators. *Science*. 2010 Oct 15;330(6002):379-85.
- 24. Chen R, Schirmer A, Lee Y, Lee H, Kumar V, **Yoo SH**, Takahashi JS, Lee C. Rhythmic PER abundance defines a critical nodal point for negative feedback within the circadian clock mechanism. *Mol Cell.* 2009 Nov 13;36(3):417-30.
- 25. Isojima Y, Nakajima M, Ukai H, Fujishima H, Yamada RG, Masumoto KH, Kiuchi R, Ishida M, Ukai-Tadenuma M, Minami Y, Kito R, Nakao K, Kishimoto W, Yoo SH, Shimomura K, Takao T, Takano A, Kojima T, Nagai K, Sakaki Y, Takahashi JS, Ueda HR. CKlepsilon/delta-dependent phosphorylation is a temperature-insensitive, period-determining process in the mammalian circadian clock. *Proc Natl Acad Sci U S A.* 2009 Sep 15;106(37):15744-9.
- 26. Lee H, Chen R, Lee Y, **Yoo SH**, and Lee C. Essential roles of CKlδ and CKlε in the mammalian circadian clock. *Proc Natl Acad Sci U S A* 2009 106 (50) 21359-21364.
- 27. Meng QJ, Logunova L, Maywood ES, Gallego M, Lebiecki J, Brown TM, Sládek M, Semikhodskii AS, Glossop NR, Piggins HD, Chesham JE, Bechtold DA, Yoo SH, Takahashi JS, Virshup DM, Boot-Handford RP, Hastings MH, Loudon AS. Setting clock speed in mammals: the CK1 epsilon tau mutation in mice accelerates circadian pacemakers by selectively destabilizing PERIOD proteins. *Neuron.* 2008 Apr 10;58(1):78-88.
- 28. Siepka SM\*, Yoo SH\*, Park J, Song W, Kumar V, Hu Y, Lee C, Takahashi JS. Circadian mutant Overtime reveals F-box protein FBXL3 regulation of cryptochrome and period gene expression. Cell. 2007 Jun 1;129(5):1011-23.
  <u>\*Equal contribution, Cover article</u>
- 29. Yoo SH, Ko CH, Lowrey PL, Buhr ED, Song EJ, Chang S, Yoo OJ, Yamazaki S, Lee C, Takahashi JS. A noncanonical E-box enhancer drives mouse Period2 circadian oscillations in vivo. *Proc Natl Acad Sci U S A.* 2005 Feb 15;102(7):2608-13.

- Welsh DK, Yoo SH, Liu AC, Takahashi JS, Kay SA. Bioluminescence imaging of individual fibroblasts reveals persistent, independently phased circadian rhythms of clock gene expression. *Curr Biol.* 2004 Dec 29;14(24):2289-95.
- 31. Yoo SH, Yamazaki S, Lowrey PL, Shimomura K, Ko CH, Buhr ED, Siepka SM, Hong HK, Oh WJ, Yoo OJ, Menaker M, Takahashi JS. PERIOD2::LUCIFERASE real-time reporting of circadian dynamics reveals persistent circadian oscillations in mouse peripheral tissues. *Proc Natl Acad Sci U S A.* 2004 Apr 13;101(15):5339-46.

# \* Cited 1430 times as of 09/29/2017

32. Oh WJ, Kim EK, Ko JH, Yoo SH, Hahn SH, Yoo OJ. Nuclear proteins that bind to metal response element a (MREa) in the Wilson disease gene promoter are Ku autoantigens and the Ku-80 subunit is necessary for basal transcription of the WD gene. *Eur J Biochem.* 2002 Apr;269(8):2151-61.

# C. Invited, peer-reviewed Articles (Reviews, Editorials, etc.) in Journals

- Chen, Z., Yoo, S., and Takahashi, J.S.: Development and Therapeutic Potential of Small Molecule Regulators of Circadian Systems. Annu. Rev. Pharmacol. Toxicol. 58, 2018. (accepted)
- 2. Gloston GF, **Yoo SH**, Chen ZJ. Clock-Enhancing Small Molecules and Potential Applications in Chronic Diseases and Aging. *Front Neurol.* 2017 Mar 15;8:100.
- 3. **Yoo SH**, Eckel-Mahan K. Hippocampal PER1: a circadian sentinel controlling RSKy activity during memory formation. *J Neurochem.* 2016 Sep;138(5):650-2
- 4. Nohara K, **Yoo SH**, Chen Z. Manipulating the circadian and sleep cycles to protect against metabolic disease. *Front Endocrinol* 6:35, 2015 Mar 23;6:35
- 5. Chen Z, **Yoo SH**, and Takahashi JS. Small molecule modifiers of circadian clocks. *Cell Mol Life Sci* 2013 Aug;70(16):2985-98

# D. Chapters

 Nohara, K., Yoo, S., and Chen, Z.: Developing circadian therapeutics against age-related metabolic decline. Circadian Rhythms and Their Impact on Ageing. Editors: S.M. Jazwinski, S.M. Hill, V.P. Perepelitsa. Springer Press (accepted).

# E. Books

# F. Other Professional Communications

- 1. Presentations
- 2008 11 <sup>th</sup> Biannual Society for Research on Biological Rhythms meeting, Florida
- 2010 Yonsei University, Department of Biological Sciences, Korea
- 2012 13<sup>th</sup> Biannual Society for Research on Biological Rhythms meeting, Florida

- 2012 Brain Research Center International Conference, Korea
- 2012 Seoul National University, Department of Biological Sciences, Korea
- 2012 KAIST, Department of Biological Sciences, Korea
- 2012 POSTECH, Department of Life Science, Korea
- 2012 Ajou University, College of Medicine, Korea
- 2013 Texas A&M University, SECTS for Clocks
- 2013 Cincinnati Children's Hospital Medical Center
- 2014 University of Kentucky, Physiology department
- 2015 UT Health Science Center Department of Integrative Biology and Pharmacolgy
- 2015 Seoul National University, Department of Biological Sciences, Korea
- 2015 Seoul National University, College of Medicine, Korea
- 2015 Kyung Hee University, College of Medicine, Korea
- 2015 POSTECH, Department of Life Science, Korea
- 2016 Korea Brain Research Institute, Korea
- 2016 DGIST, Department of Brain and Cognitive Science, Korea
- 2016 KAIST, Department of Biomedical Sciences, Korea
- 2016 Texas A&M University, SECTS for Clocks
- 2016 University of Florida, Department of physiology and functional genomics
- 2016 UTHealth, IMM Seminar Series
- 2016 2016 UKC, Dallas
- 2016 Jackson Laboratory, Bar Harbor, ME
- 2017 Virginia Tech, Blacksburg, Virginia
- 2017 Center for Inflammation & Epigenetics, Houston Methodist
- 2017 Department of Integrative Biology and Pharmacology, Mcgovern Medical School
- 2017 UTEP, Bioinformatics Department
- 2. Non-refereed Publications
- 3. Letters to the Editor
- 4. Scientific Exhibits
- 5. Videos

Scientific Journeys - Dr. Seung-Hee Yoo

https://www.youtube.com/watch?v=R-bqdNxKOuA&t=631s

6. Other

2017: Provisional patent, "Use of Polymethoxylated Flavones to Ameliorate Circadian Rhythm Disorders", Serial number 62/468,227. Filing date: March 7, 2017.

# Manuscript to be submitted:

• Yang J, Wirianto M, Gloston GF, Kim YJ, Chen ZJ, Esser K. Jin J, Yoo SH. GSK3-mediated cytoplasmic degradation of the sarcomere protein telethonin (TCAP) reveals subcellular bimodal functions of the SCF-E3

ligase FBXL21.

- Kim HK, Lee SY, Chen ZJ, Burish M, Yu X, Han L, Park HT, Lee HK, Abdi S, Yoo SH, Behavioral and molecular circadian rhythmicity in chemotheraphy induced neuropathic pain in rats.
- Ye, Y., Xu, J., Xiang, Y., Ozguz, F.M., Chen, Z., Takahashi, J.S., Yoo, S.H., L. Han. Landscape of pharmacogenomics of circadian genes in cancer therapy. Submitted
- Nohara, K., Mallampalli, V., Nemkov, T., Kim, Y., Koike, N., Han, L., Mileykovskaya, E., Takahashi, J.S., A., D'alessandro, Dowhan, W., Yoo, S.H., and Chen, Z.: Bimodal enhancement of mitochondrial function in skeletal muscle by the clock-enhancing small molecule Nobiletin promotes healthy aging. In preparation.

# G. Visiting Professorships

N/A.