

# CURRICULUM VITAE

## Zhe Han, Ph.D.

### PERSONAL DATA

Name: Zhe Han

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Date of Birth: January 25, 1974

Citizenship: USA

### EDUCATION

#### a) Undergraduate Education

1991 - 1996 Peking University, Beijing, China  
Bachelor of Science, Cell Biology and Genetics

#### b) Graduate Education

1996 – 2002 University of Michigan, Ann Arbor, Michigan  
Ph.D. in Molecular, Cellular and Developmental Biology  
Mentor: Dr. Rolf Bodmer

#### c) Postdoc Training

2002 – 2006 University of Texas Southwestern Medical Center, Dallas, Texas  
Postdoc Fellow, Molecular Biology and Developmental Biology  
Mentor: Dr. Eric N. Olson

### EMPLOYMENT AND ACADEMIC APPOINTMENT

2006 – 2013 Assistant Professor, Division of Molecular Medicine and Genetics,  
Department of Internal Medicine; Department of Cell and Developmental  
Biology, University of Michigan Medical School, Ann Arbor, MI

2014 – 2017 Associate Professor, Center for Cancer and Immunology Research,  
Children's National Health System; Department of Pediatrics,

George Washington University School of Medicine and Health Sciences,  
Washington, DC

- 2017 – 2019 Associate Professor, Center for Genetic Medicine Research, Children’s National Health System; Department of Genomics and Precision Medicine, George Washington University School of Medicine and Health Sciences, Washington, DC
- 2019 – pres. Director, Center for Precision Disease Modeling; Associate Professor, Department of Medicine, University of Maryland School of Medicine, Baltimore, MD

## **SOCIETY AND HONORS**

### Society Memberships

- 1998 – present Genetic Society of America  
1999 – present American Heart Association  
2006 – present Society of Chinese Bioscientists in America  
2011 – present American Society of Nephrology  
2016 – present American Society of Human Genetics

### Academic Honors

- 1997 University of Michigan Horace H. Rackham School of Graduate Studies, Pre-Doctorial Fellowship  
2001 American Heart Association, Council on Cardiovascular Disease, Weinstein Cardiovascular Development Research Conference, Travel Award  
2003 Pathways to Cardiac Development and Regeneration Conference, Young Investigator Award  
2006 Genetics Society of America, 47<sup>th</sup> Annual Drosophila Research Conference, Best Presentation Award  
2006 University of Michigan Biomedical Sciences Scholar  
2015 First Sino-US-Japan Pediatric Translational Medicine Forum, Lecture Award  
2017 Children’s National Health System, Children’s Research Institute 2017 Major Scientific Advances  
2019 University of Maryland School of Medicine “STRAP” (Special Trans-Disciplinary Recruitment Award Program) 2019 awardee

### MAJOR RESEARCH AWARDS

- 2001 American Heart Association Midwest Affiliate, Pre-Doctorial Fellowship  
2003 American Heart Association Texas Affiliate Post-Doctorial Fellowship  
2006 American Heart Association National Center, National Scientist Development Award  
2007 University of Michigan McKay Cardiovascular Research Grant Award  
2008 National Institute of Health (NIH) R01 Award, R01-HL090801: “A novel G protein signaling pathway controlling Drosophila cardiac morphogenesis”  
2009 National Institute of Health (NIH), American Reinvestment and Recovery Act Administration (ARRA) Supplement Award, R01-HL090801S: “Secretion pathway genes in Drosophila cardiac morphogenesis”  
2014 National Institute of Health (NIH) R01 Award, R01-DK098410: “Drosophila, a new genetic model for glomerular diseases and drug discovery”

- 2017 National Institute of Health (NIH) R01 Award, R01-HL134940: “Ancestral roles of histone-modifying genes in heart development and disease”
- 2017 National Institute of Health (NIH) R01 Award, R01- DK105055: “Anti-fibrotic action of SARA”
- 2018 National Institute of Health (NIH) R01 Award, R01-DK098410: “Modeling Nephrotic Syndrome in *Drosophila* nephrocytes”
- 2018 National Institute of Health (NIH) R01 Award, R01-DK115968: Novel mechanisms and *Drosophila* model of APOL1-HIV-1 nephropathies in children”
- 2019 National Institute of Health (NIH) R01 Award, R01- DK120908: “Integrating *Drosophila* and human podocyte studies to discover APOL1 renal toxicity”
- 2019 National Institute of Health (NIH) INCLUDE Supplement Award, R01-HL134940S: “Using *Drosophila* heart to map candidate genes associated with Down Syndrome Congenital Heart Disease”

COMMUNITY SERVICE AWARD

- 2017 Thomas Jefferson High School for Science and Technology, Mentorship Program Award

**ADMINISTRATIVE DUTIES & UNIVERSITY ACTIVITIES**

*University of Michigan Medical School, Department of Cell and Developmental Biology*

- 2008 – 2009 Program In Biomedical Sciences (PIBS) Admission Committee
- 2009 – 2010 Graduate Student Affairs Committee, Department of Cell and Developmental Biology
- 2010 University of Michigan, Cardiovascular Center, McKay grant committee
- 2010 - 2012 Graduate Program Committee, Department of Cell and Developmental Biology
- 2011-2012 University of Michigan, Organogenesis Center Grant Committee
- 2013 University of Michigan, O’Brien Kidney Center, Internal grant committee
- 2008-2013 Principle Investigator, NIH R01, HL090801, A novel G protein signaling pathway controlling *Drosophila* cardiac morphogenesis.

*Children’s National Health System (CNHS) and George Washington University (GWU)*

- 2017 – present Chair, Center of Genetic Medicine Scientific Seminar Committee
- 2017 – present Chair, Center of Genetic Medicine Outreach Committee
- 2017 – present Person-in-charge, CNHS Single Cell RNA-seq Initiative
- 2014 – present Principle Investigator, NIH R01, DK098410, *Drosophila*, a new genetic model for glomerular diseases and drug discovery
- 2017 – present Principle Investigator, NIH R01, HL134940, Ancestral roles of histone-modifying genes in heart development and disease
- 2017 – present Site Investigator, NIH R01, DK080236, Anti-fibrotic action of SARA (PI: H William Schnaper)
- 2018 – present Principle Investigator, NIH R01, DK115968, Novel mechanisms and *Drosophila* model of APOL1-HIV-1 nephropathies in children (Multi-PI: Patricio Ray)
- 2019 – present Principle Investigator, NIH R01, DK120908, Integrating *Drosophila* and human podocyte studies to discover APOL1 renal toxicity mechanism and therapeutic targets

### National / International Committees

- 2016 – present      Co-Chair, Scientific Committee, Society of Chinese Bioscientists in America (SCBA) DC-Baltimore Chapter
- 2017 – present      Chair, National Membership Committee, Society of Chinese Bioscientists in America (SCBA)

### **EDITORIAL ACTIVITIES**

- 2006 –      Manuscript Reviewer, *Developmental Biology*
- 2007 –      Manuscript Reviewer, *Genetics*
- 2008 –      Manuscript Reviewer, *PLOS One*
- 2009 –      Manuscript Reviewer, *Journal of Cell Science*
- 2009 –      Manuscript Reviewer, *Journal of Cell Biology*
- 2010 –      Manuscript Reviewer, *Development*
- 2010 –      Manuscript Reviewer, *Genesis*
- 2010 –      Manuscript Reviewer, *PLOS Biology*
- 2011 –      Manuscript Reviewer, *Cell and Tissue Research*
- 2012 –      Manuscript Reviewer, *Current Biology*
- 2013 –      Manuscript Reviewer, *Circulation Research*
- 2013 –      Manuscript Reviewer, *PLOS Genetics*
- 2014 –      Manuscript Reviewer, *Cell and Biosciences*
- 2014      Guest Associate Editor, *PLOS Genetics*
- 2015 –      Manuscript Reviewer, *Developmental Cell*
- 2015 –      Manuscript Reviewer, *Aging Cell*
- 2016      Guest Associate Editor, *PLOS Genetics*
- 2016 –      Manuscript Reviewer, *JASN*
- 2016 –      Manuscript Reviewer, *eLIFE*
- 2017 –      Manuscript Reviewer, *Human Molecular Genetics*
- 2017 –      Manuscript Reviewer, *Scientific Reports*
- 2017      Special Issue Editor, *Cell and Biosciences*
- 2017 –      Manuscript Reviewer, *Frontiers in Pediatrics*
- 2017 –      Manuscript Reviewer, *Journal of Child Science*
- 2018 –      Manuscript Reviewer, *Kidney International*
- 2018 –      Manuscript Reviewer, *Nature Communications*
- 2018 –      Review Editor, *Frontiers in Genetics*
- 2019 –      Manuscript Reviewer, *Nature Review Nephrology*
- 2019 –      Manuscript Reviewer, *The FASEB Journal*

### **GRANT REVIEW ACTIVITIES**

- 2009-2012      Reviewer, University of Michigan, Cardiovascular Center, McKay Grants
- 2011-2012      Reviewer, University of Michigan, Organogenesis Center grants
- 2012-2013      Reviewer, Italian Ministry of Health (MOH) grants

- 2013 Reviewer, University of Michigan, O'Brien Kidney Center, Internal kidney research grant
- 2013 Ad Hoc Reviewer, National Institute of Health (NIH), Cardiovascular Development and Differentiation (CDD) Study Section
- 2014 Ad Hoc Reviewer, NASA International Life Science Research Program
- 2014 Ad Hoc Reviewer, National Institute of Health (NIH), U54 O'Brien Center Grant Special Review Panel
- 2014 Ad Hoc Reviewer, National Institute of Health (NIH), Diabetic Complications Consortium (DiaComp) Pilot Grant
- 2015 Ad Hoc Reviewer, National Institute of Health (NIH), Cardiovascular Development and Differentiation (CDD) Study Section
- 2015 Ad Hoc Reviewer, National Institute of Health (NIH), Center for Scientific Review, Special Emphasis Panel on Small Business Grants (ZRG1 DKUS-L11)
- 2016 Ad Hoc Reviewer, National Institute of Health (NIH), Diabetic Complications Consortium (DiaComp) Pilot Grant
- 2017 Ad Hoc Reviewer, UK Kidney Foundation Grant
- 2018 Ad Hoc Reviewer, National Institute of Health (NIH), Center for Scientific Review (CSR), CSR Anonymization Project for R01 reviews
- 2019 Scientist Reviewer, Department of Defense, Congressionally Directed Medical Research Programs (CDMRP), Urologic Disease panel

**SCIENTIFIC MEETING ORGANIZED**

- 2017 Meeting Organizer: SCBA DC-Baltimore Chapter 2017 Annual Scientific Symposium, Johns Hopkins University Rockville Campus, Gaithersburg, MD
- 2020 Meeting Organizer: SCBA DC-Baltimore Chapter 2020 Annual Scientific Symposium, University of Maryland College Park, Silver Spring, MD

**EDUCATIONAL ACHIEVEMENTS**

a) Courses taught

- 2007 University of Michigan, Department of Cell and Developmental Biology (CDB)  
CDB 580 Developmental Biology  
Role: Guest Lecturer  
Number of Lectures presented: 4
- 2008 University of Michigan, Department of Cell and Developmental Biology (CDB)  
CDB 580 Developmental Biology

Role: Guest Lecturer  
Number of Lectures presented: 4

- 2008 CDB 680 Organogenesis (Heart Development Special Module)  
Role: Course director  
Number of Lectures organized: 12  
Number of Lectures presented: 4
- 2009 University of Michigan, Department of Cell and Developmental Biology (CDB)  
CDB 580 Developmental Biology  
Role: Guest Lecturer  
Number of Lectures presented: 4
- 2010 University of Michigan, Department of Cell and Developmental Biology (CDB)  
CDB 580 Developmental Biology  
Role: Guest Lecturer  
Number of Lectures presented: 4
- 2011 University of Michigan, Department of Cell and Developmental Biology (CDB)  
CDB 530 Cell Biology  
Role: Guest Lecturer and Discussion Section Leader  
Number of Lectures presented: 2  
Discussion Section lead: 12
- 2012 University of Michigan, Department of Cell and Developmental Biology (CDB)  
CDB 530 Cell Biology  
Role: Guest Lecturer and Discussion Section Leader  
Number of Lectures presented: 2  
Discussion Section lead: 12

b) New courses or program developed

- 2008 CDB 680 Organogenesis (Heart Development Special Module)  
Role: Course director  
Number of Lectures organized: 12  
Number of Lectures presented: 4

I was responsible to develop this new special module for heart development, for the CDB 680 Organogenesis course in 2008. This 8-week module included two lectures or seminars each week, given by experts in the area of heart development, followed by mock grant proposal from students as a final exam.

c) Students or postdoc fellows trained as the primary advisor

Director mentor for over 30 postdocs, students, and technicians (see Mentorship Table at the end for details).

## **GRANTS AWARDED OR PENDING**

### **Active Grants**

**Han, Zhe (single PI)** R01-DK098410 4/10/2014 – 7/31/2023  
Modeling Nephrotic Syndrome in Drosophila nephrocytes  
National Institute of Health (NIH), National Institute of Diabetes and Digestive and Kidney diseases (NIDDK)  
The goal of this project is to establish the Drosophila nephrocyte as a primary model system for modeling nephrotic syndrome caused by genetic mutations in humans.  
Yearly Direct Costs of Award: \$225,000.00  
Role: PI (single-PI)  
Percent Effort: 20%

**Han, Zhe (single PI)** R01-HL134940 7/20/2017 – 6/30/2021  
Ancestral roles of histone-modifying genes in heart development and disease  
National Institute of Health (NIH), National Heart Lung and Blood Institute (NHLBI)  
Mutations in histone-modifying genes have been identified as a major risk factors from the genomic sequencing of Congenital Heart Disease (CHD) patients, but the roles of histone modifying genes in heart development remain unclear. The goal of this project is to study the role of histone-modifying genes in heart development, using Drosophila as a model system. We will also establish a series of fly models of Congenital Heart Disease, using the exact same histone modifying gene mutations identified from the patients, to better understand the disease mechanisms.  
Yearly Direct Costs of Award: \$250,000.00  
Role: PI (single-PI)  
Percent Effort: 20%

**Han, Zhe (site PI)** R01- DK105055 8/1/2017 – 7/31/2021  
Anti-fibrotic action of SARA  
National Institute of Health (NIH), National Institute of Diabetes and Digestive and Kidney diseases (NIDDK)  
Fibrosis, the process of scarring, is a common mechanism by which kidney injury progresses to kidney loss. We discovered that a signaling molecule, Smad anchor for receptor activation, or SARA, might maintain kidneys in a healthy state by preventing them from producing scar when they are damaged. The goal of this project is to better understand the way SARA acts in the tissues to oppose scarring, to learn what makes SARA levels go up or down, and to identify the actions of SARA using Drosophila and mouse as model systems.  
Yearly Direct Costs of Award: \$50,000.00  
Role: Site-PI (PI: H William Schnaper, Northwestern University)  
Percent Effort: 5%

**Han, Zhe (multi-PI)** R01-DK115968 9/15/2018 – 6/30/2023  
Novel mechanisms and Drosophila model of APOL1-HIV-1 nephropathies in children  
National Institute of Health (NIH), National Institute of Diabetes and Digestive and Kidney diseases (NIDDK)  
The goal of this project is to develop the Drosophila HIV-1 nephropathy models and use it to study the molecular mechanism of HIV-associated nephropathy.  
Yearly Direct Costs of Award (to the Han lab): \$178,000.00  
Role: Multi-PI, with Dr. Patricio Ray at the University of Virginia  
Percent Effort: 20%

**Han, Zhe (single PI)** R01- DK120908 3/1/2019 – 12/31/2022  
*Integrating Drosophila and human podocyte studies to discover APOL1 renal toxicity mechanism and therapeutic targets*  
National Institute of Health (NIH), National Institute of Diabetes and Digestive and Kidney diseases (NIDDK)  
The goal of this project is to develop the Drosophila model APOL1 nephropathy model and use it to study the molecular mechanism of APOL1-associated nephropathy.  
Yearly Direct Costs of Award: \$225,000.00  
Role: PI (single-PI)  
Percent Effort: 20%

**Han, Zhe (PI)** R01-HL134940S (INCLUDE Program Suppl.) 10/1/2019 – 9/30/2021  
*Using Drosophila heart to map candidate genes associated with Down Syndrome Congenital Heart Disease*  
National Institute of Health (NIH), National Heart Lung and Blood Institute (NHLBI)  
The goal of this project is to use Drosophila to map the genes that are associated with Down Syndrome Congenital Heart Disease  
Total Direct Costs of Award: \$500,000.00  
Role: PI  
Percent Effort: 5%

**Han, Zhe (Site-PI)** R01-DK119380 9/18/2019 – 8/31/2024  
*Whole Genome Sequencing for Nephrotic Syndrome Discovery*  
National Institute of Health (NIH), National Institute of Diabetes and Digestive and Kidney diseases (NIDDK)  
The goal of this project is to use *Drosophila* to test the function of novel genetic variants identified from nephrotic syndrome patients.  
Total Direct Costs of Award: \$513,380.00  
Role: Site-PI, with Matt Sampson from Harvard University.  
Percent Effort: 5%

### **Pending Grants**

**Han, Zhe (MPI)** R01 HL9821929 (20 percentile)  
*Mechanisms Underlying Gene-Environment Interactions and Congenital Heart Defects*  
National Institute of Health (NIH), National Heart Lung and Blood Institute (NHLBI)  
The goal of this project is to use Drosophila and mice to model the congenital heart disease associated with HECTD1 genetic variants and Vitamin A deficiency.  
Total Federal Fund Requested: \$3,172,476.00  
Role: multi-PI, with Dr. Irene Zohn from the Children's National Health System

### **Completed Grants**

**Han, Zhe (PI)** R01-HL090801 2/1/2008 – 8/31/2013  
*A novel G protein signaling pathway controlling Drosophila cardiac morphogenesis*  
National Institute of Health (NIH), National Heart Lung and Blood Institute (NHLBI)

The goal of this project is to identify and study the genetic components of a novel G protein signaling pathway controlling *Drosophila* cardiac morphogenesis. Since all components in this novel cardiac G protein pathway are evolutionarily conserved, this study will promote our understanding for the genetic control of cardiac integrity in both *Drosophila* and vertebrates.

Total Direct Project Funding: \$1,122,750.00

Role: PI (single-PI)

**Han, Zhe (PI)** R01HL090801-02S1 7/15/2009 - 6/30/2011

*Secretion pathway genes in *Drosophila* cardiac morphogenesis*

National Institute of Health (NIH), National Heart Lung and Blood Institute (NHLBI)

American Reinvestment and Recovery Act Administration (ARRA) Supplement

The goal of this project is to study a group of secretion pathway genes that are required for heart development.

Total Direct Project Funding: \$243,000.00

Role: PI (single-PI)

**Han, Zhe (PI)** McKay Grant 5/1/2007 – 4/30/2008

*Mechanism of statin teratogenic effects on heart development*

University of Michigan Frankel Cardiovascular Center,

Total Direct Project Funding: \$50,000.00

Role: PI (single-PI)

**Han, Zhe (PI)** AHA-0630178N 1/1/2006 – 12/31/2009

*Functional Analysis of *Drosophila* myocardin-related transcription factor (MRTF) in heart and muscle development*

American Heart Association National Center, National Scientist Development Grant

Total Direct Project Funding: \$260,000.00

Role: PI (single-PI)

**Han, Zhe (PI)** AHA-0325141Y 7/1/2003 – 6/30/2005

*Analysis of the functions of myocardin in *Drosophila* as a window into vertebrate cardiovascular development*

American Heart Association Texas Affiliate, Post-doctoral Fellowship

Total Direct Project Funding: \$91,000.00

**Han, Zhe (PI)** AHA-0010190Z 7/1/2000 - 6/30/2002

*Combinatorial Transcription Regulation of a *Drosophila* Heart Enhancer*

American Heart Association Midwest Affiliate, Pre-doctoral Fellowship

Total Direct Project Funding: \$52,000.00

## PUBLICATIONS

1. **Han, Z.**, Fujioka, M., Su, M., Liu, M., Jaynes, J.B., and Bodmer, R. (2002). Transcriptional integration of competence modulated by mutual repression generates cell-type specificity within the cardiogenic mesoderm. *Developmental Biology* 252 (2): 225 - 240. (E-pub on Dec. 15, 2002). PMID: 12482712; PMCID: PMC2693947.

2. Han, Z., Bodmer, R. (2003). Myogenic cells fates are antagonized by Notch only in asymmetric lineages of the *Drosophila* heart, with or without cell division. **Development** 130 (13): 3039 - 3051. (E-pub on July 1, 2003). PMID: 12756185.
3. Han, Z., Li, X., Wu, J. and Olson, E.N. (2004). A myocardin-related transcription factor regulates activity of serum response factor in *Drosophila*. **Proceedings of the National Academy of Sciences** 101 (34): 12567 - 12572. (E-pub on August 16, 2004). PMID: 15314239; PMCID: PMC515097.
4. Han, Z., Olson, E.N. (2005). Hand is a direct target of Tinman and GATA factors during *Drosophila* cardiogenesis and hematopoiesis. **Development** 132 (15): 3525-3536. (E-pub on June 23, 2005). PMID: 15975941.
5. Fujioka, M., Wessells, R. J., Han, Z., Liu, J., Fitzgerald, K., Yusibova, G. L., Zamora, M., Ruiz-Lozano, P., Bodmer, R., Jaynes, J. B. (2005). Embryonic even-skipped-dependent muscle and heart cell fates are required for normal adult activity, heart function, and lifespan. **Circulation Research** 97 (11), 1108-1114. (E-pub on Oct. 20, 2005). PMID: 16239588; PMCID: PMC2726805.
6. Kwon, C.\*, Han, Z.\*, Olson, E.N., and Srivastava, D. (2005). MicroRNA1 influences cardiac differentiation in *Drosophila* and regulates Notch signaling. **Proceedings of the National Academy of Sciences** 102 (52), 18987-18991. (E-pub on Dec. 15, 2005). PMID: 16357195; PMCID: PMC1315275. (\*Co-first author).
7. Han, Z., Yi, P., Li, X., and Olson, E.N. (2006). *Hand*, an evolutionarily conserved bHLH transcription factor required for *Drosophila* cardiogenesis and hematopoiesis. **Development** 133 (6): 1175-1182. (E-pub on Feb. 8, 2006). PMID: 16467358.
8. Yi, P.\*, Han, Z.\*#, Li, X., and Olson, E.N#. (2006). The mevalonate pathway controls heart formation in *Drosophila* by isoprenylation of Ggamma1. **Science** 313 (5791): 1301 – 1303. (E-pub on July 20, 2006). PMID: 16857902. (\*Co-first author and #co-corresponding author). *This paper was featured in Editor's Choice titled "Holding the heart together", Science Signaling 351, p307, 2006.*
9. Liotta, D., Han, J., Elgar, S., Garvey, C., Han, Z., and Taylor, M.V. (2007). The Him gene reveals a balance of inputs controlling muscle differentiation in *Drosophila*. **Current Biology** 17 (16): 1409 - 1413. (E-pub on Aug. 21, 2007). PMID: 17702578; PMCID: PMC1955682.
10. Liu, J., Qian, L., Han, Z., Wu, X., and Bodmer, R. (2008). Spatial specificity of mesodermal even-skipped expression relies on multiple repressor sites. **Developmental Biology** 313 (2), 876 - 886. (E-pub on Oct. 25, 2007) PMID: 18067885; PMCID: PMC2245897.
11. Elalayli, M., Hall, J. D., Fakhouri, M., Neiswender, H., Ellison, T.T., Han, Z., Roon, P., LeMosy, E.K. (2008). Palisade is required in the *Drosophila* ovary for assembly and function of the protective vitelline membrane. **Developmental Biology** 319 (2), 359 - 369. (E-pub on May 8, 2008). PMID: 18514182; PMCID: PMC2536644.
12. Yi, P., Johnson, A.N., Han, Z., Wu, J., and Olson, E.N. (2008). Heterotrimeric G proteins regulate a noncanonical function of septate junction proteins to maintain cardiac integrity in

*Drosophila. Developmental Cell* 15 (5): 704 – 713. PMID: 19000835; PMCID: PMC2736786.

13. Chen, Z., Liang, S., Zhao, Y., and **Han, Z.\*** (2012). MiR-92b regulates Mef2 levels through a negative-feedback circuit during *Drosophila* muscle development. ***Development*** 139 (19): 3543 - 3552. (E-pub on Aug. 16, 2012). PMID: 22899845; PMCID: PMC3436111. (\*Corresponding author).
14. Zhang, F., Zhao, Y., Chao, Y., Muir, K., and **Han, Z.\*** (2013). Cubilin and Amnionless mediate protein reabsorption in *Drosophila* nephrocytes. ***Journal of the American Society of Nephrology*** 24 (2): 209 - 216. (E-pub on Dec. 20, 2012). PMID: 23264686; PMCID: PMC3559489. (\*Corresponding author). (*This paper was featured by the commentary: "The Drosophila nephrocyte: Back on stage" on Journal of the American Society of Nephrology 24, 161-163, 2013.*)
15. Zhang, F., Zhao, Y., and **Han, Z.\*** (2013). An *in vivo* functional analysis system for renal gene discovery in *Drosophila* pericardial nephrocytes. ***Journal of the American Society of Nephrology*** 24 (2): 191 - 197. (E-pub on Jan. 4, 2013). PMID: 23291470; PMCID: PMC3559487. (\*Corresponding author). (*This paper was featured in Editor's Choice as "This Month's Highlights" in the February 2013 Issue of JASN titled "Drosophila facilitate study of podocytes"*).
16. Gee, H.Y., Saisawat, P., Ashraf, S., Hurd, T.W., Vega-Warner, V., Fang, H., Beck, B.B., Gribouval, O., Zhou, W., Diaz, K.A., Natarajan, S., Wiggins, R.C., Lovric, S., Chernin, G., Schoeb, D.S., Ovunc, B., Frishberg, Y., Soliman, N.A., Fathy, H.M., Goebel, H., Hoefele, J., Webern, J.W., Faul, C., **Han, Z.**, Washburn, J., Antignac, C., Levy, S., Otto, E.A., Hildebrandt, F. (2013). ARHGDI mutations cause nephrotic syndrome via defective RHO GTPase signaling. ***Journal of Clinical Investigation*** 123 (8): 3243 - 3253. (E-pub on July 8, 2013). PMID: 23867502.
17. Ashraf, S., Gee, H.Y., Woerner, S., Xie, L.X., Vega-Warner, V., Lovric, S., Fang, H., Song, X., Cattran, D.C., Avila-Casado, C., Paterson, A.D., Nitschké, P., Bole-Feysot, C., Cochat, P., Esteve-Rudd, J., Haberberger, B., Allen, S.J., Zhou, W., Airik, R., Otto, E., Barua, M., Kari, J., Böckenhauer, D., Kleta, R., Gok, F., Washburn, J., Wiggins, R.C., Choi, M., Lifton R.P., Levy S., **Han, Z.**, Salviati L., William, D.S., Pollak, M., Pei, Y., Antignac, C., Hildebrandt, F. (2013). *ADCK4* mutations promote steroid-resistant nephrotic syndrome through CoQ10 biosynthesis disruption. ***Journal of Clinical Investigation*** 123 (12): 5179 - 5189. (E-pub on Nov. 25, 2013). PMID: 24270420; PMCID: PMC3859425.
18. Gee, H.Y., Zhang, F., Ashraf, S., Kohl, S., Sadowski, C., Vega-Warner, V., Zhou, W., Lovric, S., Fang, H., Nettleton, M., Zhu, J.Y., Hoefele, J., Weber, L.T., Podracka, L., Boor, A., Fehrenbach, H., Innis, J.W., Washburn, J., Levy, S., Lifton, R.P., Otto, E.A., **Han, Z.\***, and Hildebrandt, F.\* (2015) KANK deficiency leads to podocyte dysfunction and nephrotic syndrome. ***Journal of Clinical Investigation*** 125 (6), 2375 - 2384. (E-pub on May 11, 2015) PMID: 25961457; PMCID: PMC4497755. (\*Co-corresponding author).
19. Fulga, T.A., McNeill, E.M., Binari, R., Yelick, J., Blanche, A., Booker, M., Steinkraus, B.R., Schnall-Levin, M., Zhao, Y., DeLuca, T., Bejarano, F., **Han, Z.**, Lai, E.C., Wall, D.P., Perrimon, N., Van Vactor, D. (2015) A transgenic resource for conditional competitive

- inhibition of conserved *Drosophila* microRNAs. **Nature Communications** 6: 7279. (E-published on June 17, 2015). PMID: 26081261; PMCID: PMC4471878.
20. Chen, Z. Zhu, J.Y., Fu, Y., Richman, A., and **Han, Z.\*** (2016) Wnt4 is required for ostia development in the *Drosophila* heart. **Developmental Biology** 413, 188-198. PMID: 26994311; PMCID: PMC4857614. (\*Corresponding author).
21. Patel, M.V., Zhu, J.Y., Jiang, Z., Richman, A., VanBerkum M.F. and **Han, Z.\*** (2016) Gia/Mthl5 is an aorta specific GPCR required for *Drosophila* heart tube morphology and normal pericardial cell positioning. **Developmental Biology** 414 (1): 100-107. (E-pub on March 16, 2016) PMID: 26994946; PMCID: PMC4875858. (\*Corresponding author).
22. Jiang, Z., Li, F., Wan, Y., **Han, Z.**, Yuan, W., Cao, L., Deng, Y., Peng, X., Chen, F., Fan, X., Liu, X., Dai, G., Wang, Y., Zeng, Q., Shi, Y., Zhou, Z., Chen, Y., Xu, W., Luo, S., Chen, S., Ye, X., Mo, X., Wu, X., and Li, Y. (2016) LASS5 Interacts with SDHB and Synergistically Represses p53 and p21 Activity. **Current Molecular Medicine** 16(6):582-90. PMID: 27280497; PMCID: PMC5280074.
23. Li, J., Das, J.R., Tang, P., **Han, Z.**, Jaiswal, J.K., and Ray, P.E. (2016) Transmembrane TNF- $\alpha$  facilitates HIV-1 infection of podocytes cultured from children with HIV-associated nephropathy. **Journal of the American Society of Nephrology** 28(3): 862-875. (E-pub on Nov. 3, 2016). PMID: 27811066; PMCID: PMC5328167.
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39. Wen, P., Zhang, F., Fu, Y., Zhu, J.Y., Richman A., **Han, Z.\*** (2020) Exocyst Genes Are Essential for Recycling Membrane Proteins and Maintaining Slit Diaphragm in *Drosophila* Nephrocytes. **Journal of the American Society of Nephrology** 31(5): 1024-1034 (E-pub on April 1<sup>st</sup>, 2020) PMID: 32238475. (\*Corresponding author).
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41. Zhu, J.Y., Huang, X., Fu, Y., Richman, A., Wang, Y., Zheng, P., Liu, Y., **Han, Z.\*** (2020) HIF1 is required for KRAS leukemia cell proliferation and is effectively inhibited by echinomycin treatment in *Drosophila* and mammalian models. **Nature Communication** (Submitted). (\*Corresponding author).
42. Huang, W., Zhu, J.Y., Fu, Y. **Han, Z.\*** (2020) The *Drosophila* homologs of human MLL3 and MLL4, Trr and Lpt, play conserved essential roles in heart development. **Developmental Biology** (Submitted). (\*Corresponding author).

## INVITED PRESENTATIONS

### a) Regional presentations (selected)

1. Department of Biochemistry Seminar Series, University of Michigan, Ann Arbor, Michigan. April 24<sup>th</sup>, 2007. "Genetic Control of Heart Development in *Drosophila*"
2. Department of Internal Medicine, Division of Nephrology Seminar Series, University of Michigan, Ann Arbor, MI. May 17, 2011. "Drosophila nephrocyte as a model to study genes involved in podocyte function"
3. Department of Biochemistry and Molecular Medicine, George Washington University, Washington DC. November 11, 2014. "Drosophila models for Heart, Kidney and Blood diseases and beyond".
4. George Washington University Cancer Center, Special seminar, Washington DC. Jan. 7, 2016. "Drosophila as a model for leukemia".
5. NIH, NIDDK Kidney Interest Group, Oct. 5<sup>th</sup>, 2017. "Drosophila nephrocyte, a new model for genetic kidney disease".
6. GeneDx Inc., Gaithersburg, Maryland. Jan. 11, 2018. "Functional analysis of human genetic variants in *Drosophila*".
7. Baltimore Polycystic Kidney Disease Symposium, Baltimore, MD. Sep. 23, 2019. "Modeling Genetic Kidney Diseases in *Drosophila*".

8. Bridges Seminar, University of Maryland School of Medicine, Baltimore, MD. Jan. 21, 2020. "Precision Disease Modeling in Drosophila".

b) National presentations (selected)

1. 14th Weinstein Cardiovascular Development Conference, Dallas, Texas. May 17-19, 2001. "Combinatorial regulation of cardiac gene expression and cell-type specification in Drosophila"
2. Pathways to Cardiac Development and Regeneration Conference, Dallas, Texas. Oct. 20, 2003. "Position Hand in the evolutionary conserved genetic network governing heart development"
3. Keystone Symposia, Cardiac Disease and Development, Keystone, Colorado. March 7-12, 2004. "Transcriptional regulation of the Hand gene in the Drosophila heart"
4. 46th Annual Drosophila Research Conference. San Diego, California. March 30 - April 3, 2005. "A myocardin-related transcription factor regulates activity of serum response factor"
5. Cell and Developmental Biology Seminar, Medical College of Georgia, Augusta, Georgia. Jan. 13, 2006. "Fly Fishing for Cardiogenic genes"
6. Molecular Biology Seminar Series, University of Texas Southwestern Medical Center, Dallas, Texas. March 8th, 2006. "Searching for Cardiogenic Genes in Drosophila".
7. Cardiovascular Center Seminar, Temple University, Philadelphia, Pennsylvania, April 5th, 2006. "Fly Fishing for Cardiogenic Genes"
8. Institute of Environmental Health Sciences, Wayne State University, Detroit, Michigan. June 11, 2009. "Genetic Control of Heart Tube Formation".
9. 53rd Annual Drosophila Research Conference. Chicago, IL. March 7 - 10, 2012. "MiR-92b regulates Mef2 levels through a negative feedback circuit during Drosophila muscle development."
10. Program for Aging, Development and Regeneration, Sanford Burnham Medical Research Institute, La Jolly, CA. Oct. 8, 2013. "Using Drosophila heart to validate congenital heart disease patient genetic variants".
11. Department of Internal Medicine, Rush University Medical Center, Chicago, IL. Nov. 12, 2013. "Drosophila nephrocyte as a model for podocyte biology and renal diseases".
12. Department of Medicine, Division of Medical Genetics, University of California at San Diego, San Diego, CA. Jan. 15, 2014. "The Drosophila heart as a model for renal disease".

13. Department of Cell and Developmental Biology, Upstate Medical University, Syracuse, NY. Jan. 29, 2014. "The Drosophila heart as a model for renal and cardiovascular disease".
14. National Institute of Health Workshop on Translation of Disease Genetics to High-throughput Drug Screen, Bethesda, MD. Oct 27 – 29, 2014. Invited lecture: "Drosophila Nephrocyte: A potential drug screen platform for kidney diseases".
15. National Institute of Neurological Disorders and Stroke (NINDS), NIH, November 7, 2014. "Drosophila models of Heart and Kidney diseases: Implications for Personalized Medicine in the Genomic Era".
16. Department of Medicine, Division of Nephrology, University of Pennsylvania, Philadelphia, PA. Dec. 5, 2014. "Using Drosophila to study kidney diseases".
17. Center for Cardiovascular Research, Nationwide Children's Hospital, Columbus, Ohio. December 10th, 2015. "'Drosophila models of congenital heart diseases'".
18. Renal Grand Rounds, The Feinberg School of Medicine, Northwestern University, Chicago, IL. June 16, 2016. "Renal and cardiac fibrosis in Drosophila".
19. Department of Cell and Molecular Biology, Tulane University, Nov. 6th, 2017. "Modeling heart, kidney and blood diseases in the Genomics Era".
20. The 2<sup>nd</sup> RAS Initiative Symposium, Frederick, MD. Dec. 6-8, 2017. "Synthetic lethal genetic screen and drug screen using a fly leukemia model induced by oncogenic KRAS".
21. NIH, National Human Genome Research Institute, Bethesda, MD. Jan. 18, 2018, "Personalized Drosophila models for functional analysis of human genetic variants".
22. The Cardiovascular Institute at the Nationwide Children's Hospital, Columbus, OH. Feb. 9, 2018. "Personalized Drosophila Models for Human Diseases".
23. Department of Cell Biology, University of Virginia School of Medicine, Charlottesville, VA. Feb. 24, 2019. "Human Disease Modeling in Drosophila".
24. Icahn School of Medicine at Mount Sinai, Division of Nephrology, New York, NY. Nov. 1<sup>st</sup>, 2019. "Using Drosophila nephrocyte to study glomerular diseases".

c) International presentations (selected)

1. The 9th International Podocyte Conference, Miami, FL. April 22-25, 2012. "Drosophila nephrocytes combines podocyte filtration with renal proximal tubule reabsorption as a model to study renal disease genes".

2. American Society of Nephrology (ASN) Kidney Week 2012, San Diego, CA, Nov. 1 - 4, 2012. "Drosophila nephrocyte, a novel genetic model to identify and study genes involved in renal function and renal disease".
3. The 54th Annual Drosophila Research Conference. Washington DC, April 3 – 7, 2013 "Renal proximal tubule receptors Cubilin and Amnionless mediate protein reabsorption in Drosophila nephrocytes".
4. The 10th International Podocyte Conference, Freiburg, Germany, June 4 – 6, 2014 "Drosophila cardiac nephrocyte, a new model for glomerular diseases". Invited speaker for special seminar.
5. The 22nd Weinstein Cardiovascular Development Conference, Boston, MA, 4/30 – 5/2, 2015. "Gia, a novel GPCR essential for Drosophila heart development".
6. The 3rd Asia-Pacific Drosophila Research Conference, Beijing, China. May 11-14, 2015. "Drosophila models of heart and kidney diseases".
7. Life Science Institute, Tsinghua University, Beijing, China, November 5, 2015. "Using Drosophila to Study Heart and Kidney Diseases".
8. Xiangya Hospital, Changsha, China, November 11, 2015. "Drosophila models of congenital heart diseases and leukemia".
9. First Sino-US-Japan Pediatric Translational Medicine Forum, Shanghai Children's Medical Center, Shanghai, China, November 13-14, 2015. "KRas Synthetic Lethality Screen Using Leukemia Model".
10. Peking University Hospital, Beijing, China, November 18, 2015. "Drosophila models of congenital heart diseases and glomerular kidney diseases".
11. The 11th International Podocyte Conference, Haifa, Israel, April 3-6, 2016. "Drosophila nephrocyte as a model for podocyte biology".
12. American Society of Nephrology (ASN) Kidney Week 2016, Chicago, IL. Nov. 15 - 20, 2016. "Drosophila model of APOL1 nephropathy".
13. Institute of Genetics and Developmental Biology, Chinese Academy of Sciences, Beijing, China. July 25, 2016. "Modeling heart and kidney diseases in Drosophila".
14. Keystone Symposia: Molecular Mechanisms of Heart Development (X7), Keystone, Colorado. March 26 – 30, 2017. "High throughput in vivo functional validation of candidate Congenital Heart Disease genes in Drosophila".
15. The 24<sup>th</sup> Weinstein Cardiovascular Development Conference, Columbus, OH, May 4 – 7, 2017. "Functional validation of candidate Congenital Heart Disease genes in Drosophila".

16. Keystone Symposia: Molecular Mechanisms of Heart Development (X7), Keystone, Colorado. March 26 – 30, 2017. “High throughput in vivo functional validation of candidate Congenital Heart Disease genes in Drosophila”.
17. Special Invited Seminar, National Taiwan University, Taipei, Taiwan. June 5th, 2017. “Drosophila models of Renal Diseases”.
18. American Society of Nephrology (ASN) Kidney Week 2017, New Orleans, LA. Nov. 2 - 5, 2017. “RNA of APOL1 Risk Alleles Causes Cellular Toxicity Through the PKR Pathway”.
19. American Society of Nephrology (ASN) Kidney Week 2017, New Orleans, LA. Nov. 2 - 5, 2017. “Conserved Transcriptional Changes in Drosophila and Mouse Models of APOL1 Nephropathy”.
20. Weinstein Cardiovascular Development and Regeneration Conference, Nara, Japan. May 16-18, 2018. “Drosophila heart as a model to study Congenital Heart Disease”.
21. The 12<sup>th</sup> International Podocyte Conference, Montreal, Canada, May 30 – June 2, 2018. “Fly nephrocytes to study podocyte biology and glomerular disease”.
22. Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences, Shanghai, China. August 30, 2018. “Drosophila models of heart and kidney diseases”.
23. The 2<sup>nd</sup> International Forum on Polycystic and Rare Kidney Diseases, Hefei, China. Sep 3 – 5, 2018, “Using Drosophila to model rare genetic kidney diseases”.
24. The National Clinical Research Center for Kidney Disease, Nanfang Hospital, Southern Medical University, Guangzhou, China. Sep. 10, 2018. “Modeling kidney diseases in Drosophila”.
25. Weinstein Cardiovascular Development Conference, Indianapolis, Indiana. May 10, 2019. “Drosophila as a model for Congenital Heart Disease”.

## **NEWS RELEASES ABOUT THE HAN LAB RESEARCH**

1. APOL1 linked to reduced nephrocyte function, increased cell size, accelerated cell death (Public Release: November 18, 2016)  
Link:  
[https://www.eurekalert.org/pub\\_releases/2016-11/cnhs-alt111816.php](https://www.eurekalert.org/pub_releases/2016-11/cnhs-alt111816.php)
2. High-throughput, in vivo validation of candidate congenital heart disease genes (Public Release: February 9, 2017)  
Link:  
[https://www.eurekalert.org/pub\\_releases/2017-02/cnhs-hiv020917.php](https://www.eurekalert.org/pub_releases/2017-02/cnhs-hiv020917.php)
3. Drosophila effectively models human genes responsible for genetic kidney diseases (Public Release: March 17, 2017)  
Link:

<https://www.sciencedaily.com/releases/2017/03/170317180606.htm>

4. Studying fruit flies to better understand human kidneys  
(Public Release: April 6, 2017)  
Link: <https://innovationdistrict.childrensnational.org/tag/rab-proteins>
5. Supplement can lessen kidney damage linked to genetic mutations in transgenic fruit flies  
(Public Release: April 20, 2017)  
Link: [https://www.eurekalert.org/pub\\_releases/2017-04/cnhs-scl042017.php](https://www.eurekalert.org/pub_releases/2017-04/cnhs-scl042017.php)
6. Lab led by Zhe Han, Ph.D., receives \$1.75 million from NIH to continue pioneering research  
(Public Release: July 31, 2017)  
Link: [https://eurekalert.org/pub\\_releases/2017-07/cnhs-llb073117.php](https://eurekalert.org/pub_releases/2017-07/cnhs-llb073117.php)
7. Research led by Zhe Han featured on cover of JASN, leading kidney disease journal  
(Public Release: December 5, 2017)  
Link: <https://innovationdistrict.childrensnational.org/research-led-by-zhe-han-featured-cover-of-jasn-leading-kidney-disease-journal/>
8. \$2 million NIH grant for treating disease linked to APOL1  
(Public Release: April 2, 2019)  
[https://www.eurekalert.org/pub\\_releases/2019-04/cnhs-ng040219.php](https://www.eurekalert.org/pub_releases/2019-04/cnhs-ng040219.php)  
<https://innovationdistrict.childrensnational.org/2m-nih-grant-for-treating-disease-linked-to-apol1/>
9. NUP160 genetic mutation linked to steroid-resistant nephrotic syndrome  
(Public Release: March 26, 2019)  
Link: [https://www.eurekalert.org/pub\\_releases/2019-03/cnhs-ngm032019.php](https://www.eurekalert.org/pub_releases/2019-03/cnhs-ngm032019.php)  
<https://innovationdistrict.childrensnational.org/nup160-genetic-mutation-linked-to-steroid-resistant-nephrotic-syndrome/>  
<https://www.brightsurf.com/news/article/032619479313/nup160-genetic-mutation-linked-to-steroid-resistant-nephrotic-syndrome.html>
10. UM School of Medicine Scientist Receives NIH Award to Study Heart Disease Related to Down Syndrome (Public Release: September 25, 2019)  
Link: <https://www.medschool.umaryland.edu/news/2019/UM-School-of-Medicine-Scientist-Receives-NIH-Award-to-Study-Heart-Disease-Related-to-Down-Syndrome.html>
11. UM School of Medicine Researchers Identify Mechanism to Explain Role of Certain Gene Mutations in Kidney Disease (Public Release: April 03, 2020)  
Link: <https://www.medschool.umaryland.edu/news/2020/UM-School-of-Medicine-Researchers-Identify-Mechanism-to-Explain-Role-of-Certain-Gene-Mutations-in-Kidney-Disease.html>

## SERVICE TO COMMUNITY

2015 – present	Member, Board of Directors, Society of Chinese Bioscientists in America (SCBA) DC-Baltimore Chapter
2015 – present	Member, Mentorship Program, Thomas Jefferson Magnet High School for Science & Technology (TJHSST)
2017 – present	Chair, National Membership Committee, Society of Chinese Bioscientists in America (SCBA)
2016 – 2017	Chair, Scientific Committee, Society of Chinese Bioscientists in America (SCBA) DC-Baltimore Chapter
2017	Organizer, 2017 SCBA DC-Baltimore Chapter Scientific Symposium

## MENTORSHIP TABLE

Name	Type	Date	Mentorship	Guided Work	Current Position	Evidence of Achievement
Peng Yi	Graduate Student	2003 - 2006	Informal	Ph.D. thesis, Drosophila heart development	Assistant Professor, Harvard University	1st-author in a Science paper; and coauthor in a Development paper
Xiumin Li	Technician	2003 - 2006	Informal	Mentor, Drosophila heart development	Research Scientist, Amgen Inc.	Co-author in a Science paper, a PNAS paper & a Development paper
Jiang Wu	Technician	2003 - 2006	Informal	Mentor, Drosophila heart development	Research Associate, UT Southwestern	Co-author in a PNAS paper
Shuaiying Cui	Postdoc	2006 - 2008	Formal	Mentor, Roles of microRNAs in heart development	Staff Scientist, University of Michigan	Protocol development
Xun Wang	Postdoc	2006 - 2009	Formal	Mentor, Roles of microRNAs in heart development	Physician, Ann Arbor, Michigan	Protocol development
Fujian Zhang	Postdoc	2007 - 2013	Formal	Research mentor, Drosophila nephrocyte genetic screen	Assistant Professor, Southern Medical University, China	1st author in three JASN papers; co-first author in a JCI paper; co-author in 4 papers.

Shanshan Liang	Graduate Student	2007 - 2012	Formal	Mentor, Roles of microRNAs in heart development	Staff scientist, FDA	Co-author in a Development paper
Ying Zhao	Technician	2008 - 2013	Formal	Mentor, Drosophila heart development and nephrocyte function	Staff scientist, University of Michigan	Co-author in a Development paper and two JASN papers
Meghna Patel	Graduate Student	2009 - 2013	Informal	Ph.D. thesis, Mth15/Gia in heart development	Assistant Professor, Wayne State University	First author paper in Developmental Biology
Zhimin Chen	Postdoc	2009 - 2014	Formal	Mentor, microRNA and WNT pathway in heart development	Lab manager, University of Michigan	First author papers in Development, and Developmental Biology
Katherine Muir	Research Assistant	2011 - 2013	Formal	Mentor, Drosophila nephrocyte genetic screen	Medical School, University of Michigan	Co-author in a JASN paper
Margaret Nettleton	Technician	2014 - 2016	Formal	Mentor, Drosophila heart development	Naval Health Professions Scholarship Program	Co-author in a paper in eLife; Recipient of the Naval Health Professions Scholarship
Vivek Batheja	Student Intern	2015 - 2016	Formal	Mentor, Drosophila model of diabetic nephropathy	7-year medical program at the GWU	Admitted to the highly competitive GWU 7-year medical program
Jessica Nguyen	Student Intern	2015 - 2016	Formal	Mentor, Drosophila model of diabetic nephropathy	Pre-med at the Virginia Commonwealth University	Full scholarship at the VCU
Zhiping Jiang	Visiting scholar	2015 - 2016	Formal	Mentor, Drosophila leukemia model	Assistant Professor, Xiangya Hospital, China	Co-author in a Developmental Biology paper
Junyi Zhu	Postdoc	2014 - 2017	Formal	Mentor, Drosophila heart, kidney, blood disease models	Assistant Professor, University of Maryland Baltimore	Five 1 <sup>st</sup> -author papers in eLife, Development, JASN, etc.; six co-author papers

Helen Tran	Student Intern	2016 – 2017	Formal	Mentor, fly model of diabetic nephropathy	Pre-med at the Virginia Tech University	Scholarship at the Virginia Tech
Simone Kirkland	Technician	2016 – 2017	Formal	Mentor, Fly nephrocyte function and heart development	Research Associate, USDA	Development of several bio-protocols; Position at the USDA
Feng Zhao	Visiting scholar	2016 – 2017	Formal	Drosophila model of NUP-associated nephropathy	Assistant Professor, Fuzhou Hospital	1 <sup>st</sup> author paper in JASN
Yulong Fu	Research Associate	2015 – present	Formal	Mentor, fly nephrocyte function and kidney disease models	Assistant Professor, George Washington University	Four 1 <sup>st</sup> -author papers in JASN, Hum. Mol. Gen., etc.; five co-author papers
Adam Richman	Lab manager	2015 – 2019	Formal	Mentor, Drosophila disease models	Grant writer, Children's National Health System, DC	Co-author in 7 papers
Yiming Ma	Postdoc	2017 – 2019	Formal	Mentor, Fly nephrocyte function and leukemia models		1 co-author manuscript
Wen Huang	Visiting scholar	2017 – 2018	Formal	Mentor, fly heart development		1 first author manuscript, 1 co-author manuscript
Hanhan Liu	Postdoc	2017 – present	Formal	Mentor, fly heart, muscle and metabolic disease models		4 first author manuscripts
Jin-gu Lee	Research Associate	2017 – present	Formal	Mentor, nephrocyte cell biology, human podocytes		2 first author manuscripts, 2 co-author manuscripts
Xiaohu Shawn Huang	Postdoc	2018 – present	Formal	Mentor, Drosophila leukemia models		Two co-1 <sup>st</sup> -author papers, 3 manuscripts
Pei Wen	Research Associate	2018 – present	Formal	Mentor, Drosophila nephrocyte cell biology		1 first author paper in JASN, 5 manuscripts
Tian Xu	Visiting scholar	2018 – 2019	Formal	Mentor, fly kidney disease model & drug screen		2 manuscripts

Youming Tan	Research Associate	2018 – 2019	Formal	APOL1 structure function study		1 manuscript
Luyao Wang	Visiting Graduate Student	2018 – present	Formal	Mentor, Fly kidney disease models		2 manuscripts
Jeongkyu Kim	Research Associate	2019 – 2020	Formal	Epigenetic regulation in heart and kidney development	Assistant Professor, Chung Ang University, South Korea	2 manuscripts
Joyce van de Leempt	Research Associate	2019 - present	Formal	Mentor, iPSC and fly disease models		1 co-author paper
Yunpo Zhao	Postdoc	2020 - present	Formal	Mentor, Fly Alzheimer disease models		
Jianli Duan	Postdoc	2020 - present	Formal	Mentor, fly cancer models and drug screen		