# **Curriculum Vitae WUSM Format Sheng Chih Jin, Ph.D.**

**Date:** 6/28/2024

Name Jin, Sheng Chih

## Address, Telephone and email:

Washington University School of Medicine Jin Lab, Department of Genetics 660 South Euclid Avenue, Campus Box 8232 St. Louis MO, 63110-1010

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#### **Present Position:**

April 2020 - Present, Assistant Professor of Genetics and Pediatrics

#### **Education:**

National Chiao Tung University, Hsinchu, Taiwan, 2000 – 2004 B.S., Applied Mathematics

Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA, 2006 – 2008 ScM, Biostatistics

Washington University School of Medicine, St. Louis, MO, USA, 2010 – 2014 Ph.D., Human & Statistical Genetics (Advisors: Alison Goate and Carlos Cruchaga)

Yale School of Medicine, New Haven, CT, USA, 2014 – 2018 Postdoctoral Fellow (Advisors: Richard P. Lifton, Martina Brueckner, and Hongyu Zhao)

Rockefeller University, New York, NY, USA, 2018 – 2020 Postdoctoral Fellow (Advisors: Richard P. Lifton, Martina Brueckner, and Hongyu Zhao)

## **Academic Positions / Employment:**

2020 – Assistant Professor of Genetics and Pediatrics Washington University School of Medicine

## **Honors and Awards**:

2007	Cancer Research Training Award, Biostatistics Branch, Division of Cancer
0005	Epidemiology & Genetics, National Cancer Institute, NIH
2007	Departmental Scholarship, Department of Biostatistics, Johns Hopkins University
2011	Lucille P. Markey Special Emphasis Pathway in Human Pathobiology
	Fellowship, Markey Foundation, Washington University School of
	Medicine
2012	Alzheimer's Disease International Conference Travel Fellowship,
	Alzheimer's Association
2012	Best Oral Presentation Award, Human and Statistical Genetics Program
	2012 Retreat
2014	Finalist, Fourth Annual Hope Center Retreat Poster Session, Hope Center
	for Neurological Disorders, Washington University School of Medicine
2014	Howard Hughes Medical Institute Postdoctoral Fellowship, Department of
	Genetics, Yale University School of Medicine
2015	James Hudson Brown – Alexander Brown Coxe Postdoctoral Fellowship
	in the Medical Sciences, Yale University School of Medicine
2018	American Heart Association Postdoctoral Fellowship
2019	NIH/NHLBI K99/R00 Pathway to Independence Award
2019	Postdoctoral Association Career Development Award, Rockefeller
	University
2020	Rockefeller University Nominee, Blavatnik Regional Award for Young
	Scientists
2021	Children's Discovery Institute Faculty Scholar, St. Louis Children's
	Hospital
2021	Hydrocephalus Association Innovator Award
2022	Pediatric Cardiac Genomics Consortium and Cardiovascular Development
	Data Resource Center Challenge Prize

## **Editorial Responsibilities:**

- Ad Hoc Reviewer, Journal of the American College of Cardiology, Trends in Genetics, Genome Research, European Heart Journal, npj Genomic Medicine, Brain, Molecular Neurodegeneration, Genomics, Proteomics and Bioinformatics, Human Genetics, BMC Neurology, Journal of Alzheimer's Disease, Alzheimer's & Dementia, Genes, Journal of Medical Genetics, Biomolecules, STAR Protocols, Journal of Personalized Medicine
- 2013 **Review Editor**, Frontiers in Genetics, Neurogenomics Section

## **National Panels, Committees, Boards:**

N/A

## **Community Service Contributions:**

## • University Appointments and Committees

- 2020 **Member**, DBBS Admissions Committee B, Washington University School of Medicine
- 2023 **Co-coordinator**, Hope Center Monday Noon Seminars
- 2024 **Member**, MD Admissions Committee, Washington University School of Medicine

## Professional Societies and Organizations

- 2011 **Member**, American Society of Human Genetics
- 2015 **Member**, American Heart Association
- 2023 **Planning Committee**, Hydrocephalus Association & Rudi Schulte Research Institute Research Workshop
- 2024 **Member**, American Society of Human Genetics Digital Learning Committee
- **Abstract Reviewer**, American Society of Human Genetics Meeting 2024 in Denver, Colorado

## **Major Invited Professorships and Lectureships:**

## Regional

2017	"Genomics Approaches to Understand the Genetic Architecture of
	Congenital Heart Disease and Neurodevelopmental Disorders" / Genetic
	Department Seminar Series / Invited Speaker/ Washington University in
	St. Louis, St. Louis, MO

- "Genes and Mechanisms of Cerebral Palsy and Other Pediatric Movement Disorders" / Pediatric Neurology Research Working Group / Invited Speaker / Washington University in St. Louis, St. Louis, MO
- "Genes and Mechanisms of Cerebral Palsy and Other Pediatric Movement Disorders" / Genetics and Genomic Medicine Case Conference / Invited Speaker / Washington University in St. Louis, St. Louis, MO
- "Human Genetics and Molecular Mechanisms of Congenital
  Hydrocephalus" / Department of Developmental Biology Seminar Series /
  Invited Speaker / Washington University in St. Louis, St. Louis, MO
- "Computational Genomics for Congenital Disorder Research" /
   Department of Computer Science & Engineering Colloquia Series / Invited
   Speaker / Washington University in St. Louis, St. Louis, MO
- 2022 "Adventures in Computational Functional Genomics"/ MSTP Future of Medicine Seminar / Invited Speaker / Washington University in St. Louis, St. Louis, MO

- "Genes and Mechanisms of Cerebral Palsy and Other Pediatric Movement Disorders" / 2022 Department of Genetics Retreat / Invited Speaker / Washington University in St. Louis, St. Louis, MO
- 2022 "Molecular Genetics and Complex Inheritance of Congenital Heart
  Disease" / Center for Cardiovascular Research Seminar Series / Invited
  Speaker / Washington University in St. Louis, St. Louis, MO
- 2023 "Human Genetics and Functional Genomics of Rare Diseases" /
  Intellectual and Developmental Disabilities Research Center Inaugural
  Symposium / Invited Speaker / Washington University in St. Louis, St.
  Louis, MO
- "Unraveling the Mechanism Underlying Congenital Hydrocephalus through Multi-omics and Stem Cell Models" / Center of Regenerative Medicine Faculty Retreat / Invited Speaker / Washington University in St. Louis, St. Louis, MO

#### National

- 2017 "Expanded Whole Exome Sequencing Cohort Reveals Additional Novel CHD genes" / NHLBI Bench to Bassinet Program Annual Face-to-Face Meeting / Selected Oral Presentation / Rockville, MD
- "Genomics Approaches to Understand the Genetic Architecture of Congenital Heart Disease and Neurodevelopmental Disorders" / Eugene McDermott Center for Human Growth and Development Department Seminar Series / Invited Speaker / University of Texas Southwestern Medical Center, Dallas, TX
- "Genomics Approaches to Understand the Genetic Architecture of Congenital Heart Disease and Neurodevelopmental Disorders" / Institute for Genomic Medicine Seminar Series / Invited Speaker/ Nationwide Children's Hospital, Columbus, Ohio
- "Genomics Approaches to Understand the Genetic Architecture of Congenital Heart Disease and Neurodevelopmental Disorders" / Waisman Center Seminar Series / Invited Speaker / University of Wisconsin Madison, Madison, WI
- "Genomics Approaches to Understand the Genetic Architecture of Congenital Heart Disease and Neurodevelopmental Disorders" / Mindich Child Health and Development Institute Seminar Series / Invited Speaker/ Icahn School of Medicine at Mount Sinai, New York, NY
- "Exome Sequencing Implicates Genetic Disruption of Prenatal Neurogliogenesis in Sporadic Congenital Hydrocephalus" / 2020 American Society of Human Genetics, Virtual Meeting / Selected Oral Presentation / Virtual
- 2021 "Genes and Mechanisms of Cerebral Palsy and Other Pediatric Movement Disorders" / Boston Taiwanese Biotechnology Association Monthly Seminar Series / Invited Speaker / Boston Taiwanese Biotechnology Association / Virtual

- "Integrated analysis of genome sequencing, exome sequencing, and transcriptome profiling in congenital hydrocephalus" / Hydrocephalus Association Network for Discovery Science Webinar Series / Invited Speaker / Virtual

  "Molecular Genetics and Complex Inheritance of Congenital
- 2023 "Molecular Genetics and Complex Inheritance of Congenital Hydrocephalus" / Hydrocephalus Association & Rudi Schulte Research Institute Research Workshop / Invited Speaker / Dallas, TX
- 2023 "Discovery of Uniparental Disomy in 3,694 Congenital Heart Disease Trios" / NHLBI Bench to Bassinet Research Program Annual Face-To-Face Conference / Invited Speaker / Arlington, VA

#### International

- "Deep Resequencing of GWAS Loci Associated with Alzheimer's Disease" / 2012 Alzheimer's Association International Conference / Selected Oral Presentation/ Vancouver, Canada
- 2014 "Novel Coding Variants in *TREM2* Increase Risk for Alzheimer's Disease" / 2014 Alzheimer's Association International Conference / Selected Oral Presentation/ Copenhagen, Denmark
- "Unraveling the Genetic Basis of Congenital Heart Disease" / Institute of Biomedical Sciences Seminar Series / Invited Talk / Academia Sinica, Taiwan
- 2017 "Integrated Genomics Characterization of Complex Inheritance in Congenital Heart Disease" / Institute of Biomedical Sciences Seminar Series / Invited Talk / Academia Sinica, Taiwan
- 2018 "Mutations in GTPase Signal Transduction Genes in Cerebral Palsy" / 2<sup>nd</sup> International Cerebral Palsy Genomics Consortium Conference / Invited Keynote Presentation / Zhengzhou, China
- "Integrated Genomics Characterization of Complex Inheritance in Congenital Heart Disease" / Institute of Medical Genomics and Proteomics Seminar Series / Invited Talk / National Taiwan University College of Medical, Taiwan
- 2019 "A Major Role for Genes that Control Developmental Neuritogenesis in Cerebral Palsy" / 3<sup>rd</sup> International Cerebral Palsy Genomics Consortium Conference / Invited Talk /Anaheim, CA

## **Consulting Relationships and Board Memberships:**

N/A

#### **Internal Review Work**

- 2021 **Ad Hoc Reviewer**, Clinical and Translational Research Funding Program, Washington University Institute of Clinical and Translational Sciences
- 2022 **Ad Hoc Reviewer**, NGI Pilot Awards, Washington University NeuroGenomics and Informatics Center

Ad Hoc Reviewer, Clinical and Translational Research Funding Program, Washington University Institute of Clinical and Translational Sciences

#### **External Review Work**

2022	<b>Grant Reviewer</b> , Hydrocephalus Association Innovator Award
2023	Ad Hoc Reviewer, NIH, Cardiovascular and Respiratory Diseases (CRD)
	Study Section
2023	Grant Reviewer, Hydrocephalus Association Innovator Award
2023	Grant Reviewer, Sidra Medicine Precision Medicine Challenge Award
	(IRF 24)
2023	Ad Hoc Reviewer, NIH ZMH1 ERB-S (02) S - Data Analysis and
	Coordination Center for the PsychENCODE Consortium (U24)
2024	Ad Hoc Reviewer, NIH, Genetics of Health and Diseases (GHD) Study
	Section
2024	Ad Hoc Reviewer, NIH, Cardiovascular and Respiratory Diseases (CRD)
	Study Section

## **Research Support**

#### Governmental

Title: WashU Somatic Mosaicism across Human Tissues (SMaHT) Program.

Organizational Center

Agency: NIH U24NS132103

Role: Co-Investigator

Duration: 4/15/2023-03/31/2028 Amount: \$7,470,939 total costs

Title: WashU-VAI Somatic Mosaicism across Human Tissues (SMaHT) Program.

Genome Characterization Center Agency: NIH UM1DA058219

Role: Co-Investigator

Duration: 5/01/2023-04/30/2028 Amount: \$1,499,999 total costs

Title: INTERCEPT: Integrated Research Center for Human Pain Tissues

Agency: NIH/NINDS U19NS130607

Role: Co Principal Investigator (Project 1: Milbrandt/DiAntonio/Jin)

Duration: 12/01/2022-11/30/2027 Amount: \$3,644,291 Project 1 total costs

Title: INTERCEPT: Integrated Research Center for Human Pain Tissues

Agency: NIH/NINDS U19NS130607

Role: Co Principal Investigator (Data Core: Jin/Zhao)

Duration: 12/01/2022-11/30/2027

Amount: \$694,321 Data Core total costs

Title: Genomic analysis of the Multiplex, Autozygous Populations in Cerebral Palsy

(MAP CP) cohort: a focused approach to a complex disease

Agency: NIH/NINDS R01NS127108

Role: Co-Investigator

Duration: 02/01/2023-01/31/2028

Amount: \$421,321 total costs

Title: Human Genetics and Molecular Mechanisms of Congenital Hydrocephalus

Agency: NIH/NINDS 1R01NS1111029

Role: Co-Investigator

Duration: 04/01/2020 – 01/31/2025 Amount: \$199,706 total sub costs

Title: Human Genetics and Molecular Mechanisms of Vein of Galen Malformation

Agency: NIH/NINDS 1R01NS117609

Role: Co-Investigator (Subaward to Yale University)

Duration: 07/01/2020 – 06/30/2024 Amount: \$172,000 total sub costs

Title: Genetic Risk Factors for Severe Scoliosis

Agency: NIH/NIAMS 2R01AR067715

Role: Co-Investigator

Duration: 07/01/2020 - 06/30/2024

Amount: \$3,248,850 total costs (Salary Support only)

Title: Genomic Insights into the Neurobiology of Cerebral Palsy

Agency: NIH/NINDS 5R01NS106298

Role: Co-Investigator

Duration: 04/01/2019 – 12/31/2023 Amount: \$19,770 total sub costs

Title: Integrative Genomic Analysis of Congenital Heart Disease

Agency: NIH/NHLBI 4R00HL143036

Role: Principal Investigator

Duration: 04/01/2020 - 03/31/2023

Amount: \$730,167 total costs

## • Non-Governmental

Title: Discovery of novel genetic variations in cerebral palsy by whole genome

sequencing

Agency: Cerebral Palsy Alliance Research Foundation

Role: Principal Investigator

Duration: 06/01/2022 - 05/31/2027

Amount: \$225,000

Title: A Genome-Wide Assessment of Noncoding Risk Variants in Congenital

Hydrocephalus

Agency: Hydrocephalus Association

Role: Principal Investigator

Duration: 12/31/2021 - 12/30/2022

Amount: \$50,000

Title: Human Genetics and Molecular Mechanisms of Cerebral Palsy Agency: Children's Discovery Institute - St. Louis Children's Hospital

Role: Principal Investigator

Duration: 10/01/2021 - 09/30/2026

Amount: \$300,000

Title: Long-Read Genome Sequencing and Integrative Genomic Analysis for Cerebral

Palsy

Agency: CTRFP - Washington University Institute of Clinical and Translational Sciences

Role: Principal Investigator

Duration: 03/01/2021 - 02/28/2022

Amount: \$50,000

Title: Functional characterization of the Diaph1 gene using the zebrafish knock

model

Agency: Children's Discovery Institute - St. Louis Children's Hospital

Role: Principal Investigator

Duration: 02/05/2021 - 06/30/2023 (No cost extension)

Amount: \$10,000

#### Pending

Title: Molecular and cellular characterization of congenital hydrocephalus

Agency: NIH/NINDS 1R01NS131610A

Role: Principal Investigator

Duration: 04/01/2024 - 03/30/2029

Percentile: 9%

## **Undergraduate Mentoring:**

Trainee	Period	Project Title	Support	Current
				Position
Joshipura,	6/2021	Human genetics of	Mount Holyoke	Software
Kareena	_	cerebral palsy	College's Lynk	Engineer at
	8/2021		Fellowship	Capgemini

Wrubel, Max	11/2021	Human genetics of	Post-	Bioinformatici
	_	cerebral palsy	Baccalaureate	an
	7/2022		Extensive Study	Mount Sinai
			Program	
Marcial-	6/2022	Human genetics of	MGI OGR Summer	Kornfeld Post-
Rodriguez,	_	congenital	Undergraduate	Bac Scholar at
Athziri	8/2022	hydrocephalus	Scholars Program	WUSTL
Shelton, Cabria	6/2022	Human genetics of	MGI OGR Summer	Neuroprep
	_	patent ductus	Undergraduate	Scholar at
	8/2022	arteriosus	Scholars Program	WUSTL
Ruttenberg,	8/2022	Role of structural		Research
Andrew	_	variation in rare		Technician II
	8/2023	pediatric movement		WUSTL
		disorders		
Iyiyol, Tugce	8/2022	Role of transposable		BS Student
	_	elements in rare		WUSTL
		pediatric movement		
		disorders		
Brian Yu	1/2024	Human genetics of	WashU BioSURF	BS Student
	_	idiopathic peripheral		WUSTL
		neuropathy		

# **Graduate Mentoring:**

Trainee	Period	Project Title	Support	Current
				Position
Zhao, Shujuan	9/2020	Human genetics of	R01NS117609 +	PhD Candidate
(joint with Kris	_	Vein of Galen	R00HL143036 +	WUSTL
Kahle at MGH)		Malformation	Markey Pathway	
Kong, Nahyun	4/2022	Human genetics of	Start-up funds +	PhD Candidate
	_	rare movement	SMaHT UM1	WUSTL
		disorders		
Choi, Julie	4/2022	Human genetics of	WashU T32GATP	PhD Candidate
(joint with Jeffrey	_	peripheral		WUSTL
Milbrandt)		neuropathy		
Dong, Wendy	3/2023	Functional genetics of	WashU T32 GATP	MSTP
(joint with Jeffrey	_	peripheral		Candidate
Milbrandt)		neuropathy		WUSTL
Tang, Zitian	5/2023	Impact of repeat	Start-up funds +	PhD Candidate
	_	expansion in	SMaHT UM1	WUSTL
		peripheral		
		neuropathy		

Ulibarri, Jenna	7/2023	Proteogenomics in	WashU T32CMB	PhD Student
	_	peripheral	and NIH IMSD	WUSTL
		neuropathy	(R25GM103757)	
Purva Patel	4/2024	Human genetics of	Start-up funds	PhD Student
	_	late-onset Alzheimer's		WUSTL
Emma Casey	5/2024	Human genetics of	Start-up funds	PhD Student
	_	idiopathic peripheral		WUSTL
		neuropathy		
Zefan (Vivien) Li	05/2024	Human genetics of	Start-up funds	PhD Student
		idiopathic peripheral		WUSTL
		neuropathy		
Peters, Samuel	5/2020	Human genetics of	R00HL143036	Research
	_	primary Moyamoya		Specialist at
	4/2021	disease		WUSTL
King, Spencer	5/2020	Human genetics of	R00HL143036	Data Scientist
	-	cerebral palsy		Geneoscopy
	5/2021			
Yu, Xiaobing	2/2021	Single-cell RNA-	R00HL143036	PhD Student
	_	sequencing analysis		WUSTL
	11/2021	for rare neurological		
		disorders		
Shaffiey, Shohaib	2/2021	Whole genome	R00HL143036	MS Student
	_	sequencing analysis		WUSTL
	5/2021	for rare neurological		
		disorders		

# **Postgraduate Mentoring:**

Trainee	Period	Project Title	Support	Current Position
Wang, Yung-Chun	6/2021	Human genetics of	R00HL143036 +	Instructor at
	_	cerebral palsy	R01NS127108	WUSTL

# Fellowships/Scholarships/Grants to Postdocs/Students:

Precision Medicine Pathway

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Zefan (Vivien) Li

Role: Sponsor

Duration: 08/2024 - 08/2026

Amount: \$0

Precision Medicine Pathway

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Purva Patel

Role: Sponsor

Duration: 08/2024 - 08/2026

Amount: \$0

Precision Medicine Pathway

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Emma Casey

Role: Sponsor

Duration: 08/2024 - 08/2026

Amount: \$0

Scholarships to attend Jackson Laboratory's Human and Mammalian Genetics and

Genomics: The McKusick Short Course

Agency: Jackson Laboratory

Postdoc(s)/Student(s): Zefan (Vivien) Li

Role: Sponsor Duration: 08/2024 Amount: \$500

Scholarships to attend Jackson Laboratory's Human and Mammalian Genetics and

Genomics: The McKusick Short Course

Agency: Jackson Laboratory

Postdoc(s)/Student(s): Purva Patel

Role: Sponsor Duration: 08/2024 Amount: \$500

Scholarships to attend Jackson Laboratory's Human and Mammalian Genetics and

Genomics: The McKusick Short Course

Agency: Jackson Laboratory

Postdoc(s)/Student(s): Emma Casey

Role: Sponsor Duration: 08/2024 Amount: \$1,750

Annual Hope Center Retreat Poster Award

Agency: Arts & Sciences at Washington University in St. Louis

Postdoc(s)/Student(s): Julie Choi

Role: Sponsor Duration: 4/2024

Amount: \$1,000 (one-time allowance)

Washington University Summer Undergraduate Research Fellowship Program

Agency: Arts & Sciences at Washington University in St. Louis

Postdoc(s)/Student(s): Brian Yu

Role: Sponsor

Duration: 5/2024 - 08/2024

Amount: \$2,500

Washington University's T32 Cellular & Molecular Biology Training Program

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Jenna Ulibarri

Role: Sponsor

Duration: 11/2023 - 08/2024

Amount: \$27,144/year

Scholarships to attend Cold Spring Harbor Laboratory's Scientific Writing Retreat

Agency: Cold Spring Harbor Laboratory Postdoc(s)/Student(s): Yung-Chun Wang

Role: Sponsor
Duration: 10/2023
Amount: \$500

Washington University's T32 Genome Analysis Training Program

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Wendy Dong

Role: Co-sponsor

Duration: 09/2023 - 08/2024

Amount: \$34,500/year

**Precision Medicine Pathway** 

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Zitian Tang

Role: Sponsor

Duration: 08/2023 - 08/2025

Amount: \$0

Scholarships to attend Jackson Laboratory's Human and Mammalian Genetics and

Genomics: The McKusick Short Course

Agency: Jackson Laboratory

Postdoc(s)/Student(s): Zitian Tang

Role: Sponsor Duration: 07/2023 Amount: \$500

Study Abroad Scholarships

Agency: Mogam Science Scholarship Foundation

Postdoc(s)/Student(s): Nahyun Kong

Role: Sponsor

Duration: 1/2023

Amount: \$10,000 (one-time allowance)

Washington University's T32 Genome Analysis Training Program

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Julie Choi

Role: Co-sponsor

Duration: 10/2022 - 09/2024

Amount: \$34,500/year

Lucille P. Markey Special Emphasis Pathway in Human Pathobiology Fellowship

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Shujuan Zhao

Role: Sponsor

Duration: 08/2022 - 08/2024

Amount: \$4,000 (one-time stipend supplement)

**Precision Medicine Pathway** 

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Julie Choi

Role: Sponsor

Duration: 08/2022 - 08/2024

Amount: \$0

**Precision Medicine Pathway** 

Agency: Washington University School of Medicine

Postdoc(s)/Student(s): Nahyun Kong

Role: Sponsor

Duration: 08/2022 - 08/2024

Amount: \$0

Scholarships to attend Jackson Laboratory's Human and Mammalian Genetics and

Genomics: The McKusick Short Course

Agency: Jackson Laboratory

Postdoc(s)/Student(s): Shujuan Zhao

Role: Sponsor Duration: 07/2022 Amount: \$900

Scholarships to attend Jackson Laboratory's Human and Mammalian Genetics and

Genomics: The McKusick Short Course

Agency: Jackson Laboratory

Postdoc(s)/Student(s): Max Wrubel

Role: Sponsor Duration: 07/2022 Amount: \$1,800 Center of Regenerative Medicine Postdoctoral Fellowship

Title: Human genomics and molecular mechanisms of Sporadic Moyamoya disease

Agency: Washington University Center of Regenerative Medicine

Postdoc(s)/Student(s): Yung-Chun (David) Wang

Role: Sponsor

Duration: 07/01/2021

Amount: \$10,000 (signing bonus)

NIH TL1 Predoctoral Clinical Research Training Fellowship (Declined)

Title: Integrative Genomic Analysis of Cerebral Palsy and Rare Pediatric Movement

Disorders

Agency: Washington University Clinical Research Training Center

Postdoc(s)/Student(s): Amar Sheth

Role: Sponsor

Duration: 06/01/2021 - 05/31/2022

Amount: \$2,110/month

#### **Thesis Committee Advisees:**

Ciyang Wang DBBS Molecular Genetics and Genomics Chengran Yang DBBS Human and Statistical Genetics

Tong Wu Biomedical Engineering

Caitlin Dingwall WashU MSTP

Kuangying Yang DBBS Human and Statistical Genetics
Gervette Penny DBBS Molecular Genetics and Genomics

## **Qualifying Exam Committee:**

Ji-Sun Kwon DBBS Computational and Systems Biology
Evelyn Craigen DBBS Molecular Genetics and Genomics (Chair)

Dan Western DBBS Human and Statistical Genetics Kuangying Yang DBBS Human and Statistical Genetics

Grace Cooper DBBS Human and Statistical Genetics (Chair)

Paul Lee WashU MSTP (Chair)

Juanru Guo

Mariam Khanfar

Chia-Jung Lee

Chien-Wei Peng

Arnold Federico

DBBS Computational and Systems Biology

DBBS Computational and Systems Biology

DBBS Human and Statistical Genetics

DBBS Molecular Genetics and Genomics

#### **Patents:**

N/A

#### **Teaching Responsibilities:**

2021 - 2022 Lecturer, Bio5488: Genomics, Washington University School of Medicine 2021 - 2022 Study Section Co-Leader, Bio5491: Advanced Genetics, Washington University School of Medicine Lecturer, Bio5487: Genetics & Genomics of Disease, Washington 2022 -University School of Medicine 2022 -Co-director, Bio5488; Genomics, Washington University School of Medicine 2023 -Immersion Program Co-Leader, Washington University School of Medicine 2023 -Lecturer, Bio5285: Current Topics in Human and Mammalian Genetics, Washington University School of Medicine

## **Bibliography:**

- Peer Reviewed Manuscripts (\* Equal contribution; # Co-corresponding; Lab members in bold)
- 1. Caporaso N\*, Gu F\*, Chatterjee N\*, **Jin SC**, Yu K, Yeager M, Chen C, Jacobs K, Wheeler W, Landi MT, Ziegler RG, Hunter DJ, Chanock S, Hankinson S, Kraft P, Bergen AW. Genome-wide and candidate gene association study of cigarette smoking behavior. **PLoS ONE**, 2009;4(2):e4653.
- 2. Beaty TH, Murray JC, Marazita ML, Munger RG, Ruczinski I, Hetmanski JB, Liang KY, Wu T, Murray T, Fallin MD, Redett RA, Raymond G, Schwender H, **Jin SC**, Cooper ME, Dunnwald M, Mansilla MA, Leslie E, Bullard S, Lidral AC, Moreno LM, Menezes R, Vieira AR, Petrin A, Wilcox AJ, Lie RT, Jabs EW, Wu-Chou YH, Chen PK, Wang H, Ye X, Huang S, Yeow V, Chong SS, Jee SH, Shi B, Christensen K, Melbye M, Doheny KF, Pugh EW, Ling H, Castilla EE, Czeizel AE, Ma L, Field LL, Brody L. Pangilinan F, Mills JL, Molloy AM, Kirke PN, Scott JM, Arcos-Burgos M, Scott AF. A genome-wide association study of cleft lip with and without cleft palate identifies risk variants near MAFB and ABCA4. *Nature Genetics*, 2010 Jun;42(6):525-9.
- 3. Beaty TH, Ruczinski I, Murray JC, Marazita ML, Munger RG, Hetmanski JB, Murray T, Redett RJ, Fallin MD, Liang KY, Wu T, Patel PJ, **Jin SC**, Zhang TX, Schwender H, Wu-Chou YH, Chen PK, Chong SS, Cheah F, Yeow V, Ye X, Wang H, Huang S, Jabs EW, Shi B, Wilcox AJ, Lie RT, Jee SH, Christensen K, Doheny KF, Pugh EW, Ling H, Scott AF. Evidence for gene-environment interaction in a genome wide study of isolated, nonsyndromic cleft palate. *Genetic Epidemiology*, 2011 Sep;35(6):469-78
- 4. **Jin SC**, Pastor P, Cooper B, Cervantes S, Benitez BA, Razquin C, Goate AM, Ibero-American Alzheimer's Disease Genetics Group Researchers, Cruchaga C. Poole-DNA sequencing identifies novel causative variants in *PSEN1*, *GRN*, and *MAPT* in a clinical early-onset and familial Alzheimer's disease Ibero-American cohort. *Alzheimer's Research & Therapy*. 2012 Aug 20;4(4):34.

- 5. Wang H, Zhang T, Wu T, Hetmanski JB, Ruczinski I, Schwender H, Murray T, Fallin MD, Redett RJ, Raymond GV, **Jin SC**, Wu-Chou YH, Chen PK, Yeow V, Chong SS, Cheah FS, Jee SH, Jabs EW, Liang KY, Scott A, Beaty TH. The FGF&FGFR gene family and risk of cleft lip with or without cleft palate. *The Cleft Palate-Craniofacial Journal*, 2013 Jan;50(1):96-103.
- 6. Patel PJ, Beaty TH, Ruczinski I, Murray JC, Marazita ML, Munger RG, Hetmanski JB, Wu T, Murray T, Rose M, Redett RJ, **Jin SC**, Lie RT, Su-Chou YH, Wang H, Ye X, Yeow V, Chong S, Jee SH, Shi B, Scott AF. X-linked Markers in the Duchenne Muscular Dystrophy Gene Associated with Oral Clefts. *European Journal of Oral Sciences*, 2013 Apr;121(2):63-8.
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## • Spotlight

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