

## Curriculum Vitae

**Jiayuh Lin, Ph.D.**

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### **Contact Information**

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Foreign Languages: Mandarin Chinese, Taiwanese

### **Education**

1982 B.S., Biology, FU-JEN Catholic University, Taipei, Taiwan

1991 Ph.D., Genetics and Molecular Biology, University of Delaware, Thesis Advisor - Dr. Daniel T. Simmons

### **Post Graduate Education and Training**

1984 Research Assistant, Department of Biochemistry, Yang-Ming University, College of Medicine, Taipei, Taiwan

1992-1996 Post-doctoral research fellow, Department of Molecular Biology, Princeton University, Mentor – Dr. Arnold J. Levine

### **Employment History**

#### **Academic Appointments**

1997-1998 Faculty member at the Department of Dermatology, University of Michigan Medical Center, Ann Arbor, MI.

1998-2004 Assistant Professor (Tenure Track) at the Division of Gynecologic Oncology, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI.

1998-2004 Member, University of Michigan Comprehensive Cancer Center.

2000-2004 Member, Connective Tissue Oncology at the University of Michigan Comprehensive Cancer Center.

2000-2005 Member, Center for Gene Therapy at the University of Michigan.

2000-2004 Graduate faculty member in Program in Biomedical Sciences at the University of Michigan.

2000-2005 Faculty member in Medical Scientists Training Program at the University of Michigan Health System.

2001-2004 Graduate Faculty in Cellular and Molecular Biology Graduate Program and Cancer Biology Training Program at the University of Michigan Health System.

2005-Present Associate Professor with Tenure, Department of Pediatrics, College of Medicine, The Ohio State University, Columbus, OH.

2005-Present Full Member, The Ohio State University Comprehensive Cancer Center.

2005-Present Graduate Faculty, Integrated Biomedical Science, Graduate Program, The Ohio State University, Columbus, OH.

2005-Present Graduate Faculty, Molecular, Cellular & Developmental Biology Graduate Program, The Ohio State University, Columbus, OH.

2005-Present Graduate Faculty, Ohio State Biochemistry Graduate Program, The Ohio State University, Columbus, OH.

2010-Present Faculty mentor, Biomedical Sciences Major, The Ohio State University.

2012-Present Faculty member, Center for Advanced Functional Foods Research and Entrepreneurship, The Ohio State University, Columbus, OH.

2013-Present Faculty member, Food Innovation Center, The Ohio State University.

2016 Professor with tenure, department of Pediatrics, College of Medicine, The Ohio State University.

2016-Present Professor with tenure, Department of Biochemistry and Molecular Biology, School of Medicine, University of Maryland in Baltimore.

2016-Present Full Member, Molecular and Structural Biology Program, University of Maryland Marlene and Stewart Greenebaum Comprehensive Cancer Center Baltimore, MD.

2016-Present Graduate Faculty, Cancer Biology Track, Molecular Medicine Graduate Program, School of Medicine, University of Maryland, Baltimore, MD.

### **Professional Society Membership**

1998-present Full member, American Association for Cancer Research (AACR).

2013-present General member, Children's Oncology Group.

2014-2015 Full member, The American Society for Biochemistry and Molecular Biology.

2014-2015 Full member, The American Society for Cell Biology.

### **Honors And Awards**

1981 First place of undergraduate thesis research at Fu-Jen Catholic University in Taiwan.

1990 Block fellowship through competitive funding at the University of Delaware.

2001 The best basic science award at the SGO Annual Meeting was selected to Dr. William Burke. Dr. Burke is an oncology fellow worked in Dr. Lin's laboratory.

2003 A RSDP/NICHD fellowship award was selected for Dr. Dana Gossett. Dr. Gossett is an oncology fellow worked in Dr. Lin's laboratory.

2005 An institutional NIH fellowship award was selected for Beng Huh, M.D. Dr. Huh is an oncology fellow worked in Dr. Lin's laboratory.

2009 Received an AACR travel award for one of Dr. Lin's post-doctoral fellows presented the abstract at the Sixth Annual AACR International Conference: Frontiers in Cancer Prevention Research in Houston, TX.

2010 Received an AACR top-rated abstract award at the AACR Annual Meeting in Washington D. C.

2010 Received an AACR travel award for one of Dr. Lin's post-doctoral fellows presented the abstract at the Sixth Annual AACR Colorectal Cancer: Biology to Therapy Meeting in Philadelphia, PA.

2015 Feature Editorial Academy (Editorial Board) in May issue of the International Journal of Oncology.

### **Clinical Activities**

Not applicable.

### **Administrative Service**

### **Institutional Service**

1999-2004 Search Committee for the recruitment of Gynecologic Oncology fellows, University of Michigan.  
2000-2003 Medical Scientists Training program mentor, University of Michigan.  
2000-2003 Research Executive Committee in the Department of OB/GYN at the University of Michigan  
2000-2004 Cancer Biology Training Program mentor, University of Michigan.  
2005 Library oversight Committee, Department of Pediatrics, The Ohio State University.  
  
2009-2010 Scholarship Oversight Committee Volunteer, Department of Pediatrics, The Ohio State University.  
2010 Annual Research retreat planning Committee, Department of Pediatrics, The Ohio State University.  
2015-2016 Faculty Search Committee, Department of Pediatrics, The Ohio State University.  
2016-present Faculty Search Committee, Departments of Biochemistry and Molecular Biology and Pathology, University of Maryland, School of Medicine.

### **Local, National, and International Service**

### **International Service**

2012-2015 Review of research grant of the Health and Health Services Research Fund of the Food and Health Bureau, Hong Kong SAR Government.  
2012-present International Journal of Biochemistry and Molecular Biology (ISSN: 2152-4114): Senior Editorial Board.  
2013 Review of a cancer research grant for the National Medical Research Council Ministry of Health, Singapore.  
2014-Present International Journal of Oncology: Editorial Academy (Editorial Board).  
2014-present BMC Cancer: Editorial Board.

### **National Service**

2005 WISC grants reviewer, American Association for the Advancement of Science, Washington DC.  
2005-2010 The Congressionally Directed Medical Research Programs (CDMRP) Breast Cancer Research Program, Review Committee (Clinical and Experimental Therapeutics # 2 and # 4, and TRN1 panels).  
2005-2008 External Consulting and Advisory Team Member, Global Clinical Development for anti-cancer drugs, Global Health Sector, SRA, International, Inc., Fairfax, VA

- 2009-2010 NIH Special Emphasis Panel/Scientific Review Group 2009/10 ZRG1 OTC-K.
- 2013 National Cancer Institute Special Emphasis Panel; ZCA1 SRLB-J (O1) S.
- 2013-2015 Pancreatic Cancer Action Network-AACR Research Grants Scientific Review Committee.
- 2013-present American Journal of Cancer Research (ISSN: 2156-6976): Senior Editorial Board.
- 2015-2016 Pennsylvania Department of Health: Serve as a final performance external reviewer of a funded cancer research grant.
- 2016 National Cancer Institute Special Emphasis Panel (SEP #5) for NCI Omnibus R21 and NCI Omnibus R03 grant reviews.
- 2016 Invited by National Institute of General Medical Sciences, special panel to review Support of Competitive Research (SCORE) NIH grant applications.
- 2017 Invited by Cancer Drug Development & Therapeutics (CDDT) study section to review NIH applications from small business.

**2000-2016 Ad hoc reviewer for the following peer-reviewed journals:**

Molecular and Cellular Biology,  
 Cancer Research,  
 Clinical Cancer Research,  
 Molecular Cancer Research,  
 Oncogene,  
 Neoplasia,  
 Gene,  
 Gene and Cancer,  
 Cancer,  
 BMC Cancer,  
 Cancers,  
 Molecular Cancer,  
 FEBS Letters,  
 European Journal of Cancer,  
 British Journal of Cancer,  
 Experimental Cell Research,  
 Cell Death and Differentiation,  
 Cancer Biology & Therapy,  
 Molecular Pharmacology,  
 The American Journal of Pathology,  
 Journal of Medicinal Chemistry,  
 Molecular Carcinogenesis

**Local Service**

**Scientific judges for poster presentations**

- 2005-2013 The Ohio State University Medical Center Annual Scientific Retreat.
- 2006-2007 The Ohio State University Comprehensive Cancer Center Annual Scientific Retreat.
- 2010-2015 The Research Institute at Nationwide Children's Hospital, Columbus OH.
- 2013 IGP Symposium, The Ohio State University graduate Programs.
- 2013 OSBP graduate students recruitment and interviews.

2014 Denman Undergraduate Research Forum, The Ohio State University.

### **Teaching Service**

#### **High School Student Teaching**

2006 Mentor, Summer Research for Victor Huang  
2007 Mentor, Summer Research for Brian Wu (Currently in graduate school)

5-10 contact hours per week

#### **Undergraduate Student Teaching**

1987-1990 Taught undergraduate students in Biology laboratory for 5 semesters. University of Delaware.

**Undergraduate students-Lin Laboratory, University of Michigan (Dr. Lin as the mentor):** 5-10 contact hours per week

1998-1999 Rupali Patel (Undergraduate Research Opportunities Program: UROP): Became a graduate student at the University of Michigan after did research in my lab  
1999-2000 Andrea O. Sethi (UROP): Became a graduate student at the University of Michigan after did research in my lab  
2000-2001 Kori Rothman (Biology 300)  
2000-2001 Amy Ko (UROP)  
2001-2002 Wei Gu (UROP)  
2002-2003 Jessica Ho (UROP)  
2002-2003 Stefanie Stachura (UROP)  
2003-2004 Megan Bradley (UROP): awarded University of Michigan competitive summer research fellowship.

**Undergraduate students-Lin Laboratory, The Ohio State University (Dr. Lin as the mentor):** 5-10 contact hours per week

2005-2006 Christina Chan (Currently a medical doctor)  
2005-2006 Abby Loy  
2006 Jennifer Dan  
2007 Sarah Jones  
2007 Michelle Tanzil  
2008 Stephanie Deangelis (Currently a medical doctor)  
2008 Wenting Jiang  
2008-2009 Lauren Friedman (Currently a medical doctor)  
2010-2013 David Jou (Currently in medical school)  
2011-2012 Tyler Krause  
2012-2013 Angela Zhang (Currently in graduate school in Columbia University)  
2013-2014 Kevin X Rui  
2015-present Ruohan Wu

#### **Pharmacy Student Teaching**

Molecular and Cellular Biology course (College of Pharmacy), The Ohio State University, one lecture to Pharmacy students (around 60 students).

### **Graduate Student Teaching**

1. Cancer Biology (Graduate course 553, Department of Microbiology and Immunology), University of Michigan.
2. Cellular and Molecular Biology (CMB) Graduate Program student seminar/faculty talk (CMB850)- Fall Term, University of Michigan.
3. Tissue, Cellular and Molecular Basis of Disease (Department of Pathology 581)-Winter Term for graduate students, University of Michigan.
4. Molecular, Cellular & Developmental Biology Graduate Program, The Ohio State University, graduate student seminar/faculty talk (two lectures to 15-20 graduate students)
5. Molecular, Cellular & Developmental Biology Graduate Program, The Ohio State University, graduate student seminars as faculty instructor: 2 hours (Around 30 graduate students)
6. Ohio State Biochemistry Graduate Program, The Ohio State University, graduate student seminar/faculty talk (two lectures to 15-20 graduate students)
7. Integrated Biomedical Science, The Ohio State University, IBGP 8510 and other courses (four lectures to 20-25 graduate students)

### **Graduate Student-Doctoral Committees, University of Michigan**

- 2001 Heather O'Hagan, Ph.D student, Cellular and Molecular Biology Graduate Program, University of Michigan.
- 2004 Brandi Thompson, Ph.D. student, Graduate Program in Biomedical Sciences, University of Michigan.

### **Graduate Student-Doctoral Committees, The Ohio State University**

- 2005 Kates Sasser, Ph.D student, Integrated Biomedical Science Graduate Program, (Ph.D. Thesis Committee).
- 2005 Gulsah Yaman, Ph.D student, Department of Chemistry (Ph.D. Candidacy Committee).
- 2006 Yu-Yu Liu, Ph.D student, Ohio State Biochemistry Program (Ph.D. Thesis Committee).
- 2006 Georgia Triantafillou, Ph.D student, Integrated Biomedical Science Graduate Program (Advisory Committee).
- 2007 Baidehi Maiti, Ph.D student, Integrated Biomedical Science Graduate Program (Ph.D. Thesis Committee).
- 2007 Pamela Wenzel, Ph.D student, Department of Molecular Genetics (Graduate Faculty Representative).
- 2008 Stacey Fossey, Ph.D student, Department of Veterinary Biosciences, (Ph.D. Thesis Committee).
- 2009 Vandana Kumari, Ph.D student, College of Pharmacy, (Ph.D. Thesis Committee).
- 2010 Courtney Nicholas, Ph.D student, MCDB, (Ph.D. Thesis Committee).
- 2011-2013 Wenying Yu, Ph.D student, College of Pharmacy, (Ph.D. Thesis Committee).
- 2013-present Jennifer Yang, Ph.D. student, IBGP, (Ph.D. Thesis Committee).
- 2014 Punit Upadhyaya, Ph.D. student, Department of Chemistry and Biochemistry (Ph.D. Thesis defense Committee).
- 2014-present Guqin Shi, Ph.D student, College of Pharmacy, (Ph.D. Thesis Committee).
- 2015-present Hannah Komar, Ph.D student, BSGP program (Ph.D. Thesis Committee).

### **Graduate Students-Lin Laboratory, University of Michigan: 8-16 contact hours per week**

- 1997 Jennifer Changery, MS student, School of Public health, University of Michigan.

- 2003 Hsin-Jen Tsai, Ph.D. student, School of Public Health, University of Michigan.  
 2004 Aasia, Rehman, Ph.D. student, Graduate Program in Biomedical Sciences, University of Michigan.

**Graduate Students-Lin Laboratory rotation, The Ohio State University: 5-10 contact hours per week**

- 2005 Kristy Arnoczky, Ph.D student, Integrated Biomedical Science Graduate Program, The Ohio State University.  
 2005 Jessica Brown, Ph.D student, Ohio State Biochemistry Program, The Ohio State University.  
 2005 Joshua Oaks, Ph.D student, Integrated Biomedical Science Graduate Program, OSU.  
 2005 Julie Wallace, Ph.D student, MCDB, The Ohio State University.  
 2005 Jennifer Kohout, Ph.D student, Integrated Biomedical Science Graduate Program, The Ohio State University.  
 2006 Brian Hutzen. Ph.D student, MCDB, The Ohio State University.  
 2006 Amanda Clagget, Ohio State Biochemistry Program, The Ohio State University.  
 2006 Jacquie Lieblein, Ph.D student, Ohio State Biochemistry Program, The Ohio State University.  
 2006 Georgia Triantafillou, Ph.D student, Integrated Biomedical Science Graduate Program, The Ohio State University.  
 2007 Sarah Ball. Ph.D student, MCDB, The Ohio State University.  
 2007 Will Williams, Ph.D student, IBGP, The Ohio State University.  
 2011 Emily McWilliams, Ph.D student, IBGP, The Ohio State University.  
 2014 Popova Liumila. Ph.D student, MCDB, The Ohio State University.

**Graduate Students-Thesis Advisor (Dr. Lin as the thesis advisor): 8-16 contact hours per week**

- 2004 Ling Cen, Ph.D student, Ohio State Biochemistry Program, Ohio State University (Graduated in 2007): working at the Mayo Clinics, MN as a staff member.  
 2006 Jacquie Lieblein, M.S. student, Ohio State Biochemistry Program, The Ohio State University (Graduated in 2008): became a Ph.D. student at the Ohio State Univ.  
 2006 Matthew Sobo, M.S. student, MCDB, The Ohio State University (Graduated in 2010).  
 2008 Sarah Ball, Ph.D student, MCDB, The Ohio State University (Graduated in 2011): teaching position at The Ohio State University.

**International graduate Students-Ph.D. Thesis (Dr. Lin as the thesis co-advisor): 8-16 contact hours per week**

- 2013-2015 Chengguang Zhao, Ph.D. student, Nanjing University of Science and Technology, China.  
 2015-2016 Jilai Tian Ph.D. student, Southeast University, China.

**Resident and Fellow Teaching**

**1. Medical doctor Fellows- Lin Laboratory, University of Michigan (Dr. Lin as the mentor): 8-16 contact hours per week**

- 1999-2000 Melinda Huang, M.D. (Currently is a faculty member/physician in another University/hospital)  
 2000-2001 William Burke, M.D. (Currently is a faculty member/physician in another University/hospital)

- 2001-2002 Thomas Reid, M.D. (Currently is a faculty member/physician in another University/hospital)
- 2002-2003 Dana Gossett, M.D. (Currently is a faculty member/physician in another University/hospital)

2. House Officer course (Department of OB/GYN), University of Michigan.

3. **Medical doctor Fellows- Lin Laboratory, The Ohio State University (Dr. Lin as the thesis mentor):** 8-16 contact hours per week

- 2005-2007 Beng Huh, M.D. (Currently is a faculty member/physician in another University/hospital)
- 2006-2008 Jason Canner, M.D. (Currently is a faculty member/physician in another University/hospital)
- 2009-2010 Grace Ominoe, M.D. (Currently is a physician in another hospital)
- 2010-2011 Susan Reed, M.D. (Currently is a faculty member/physician at the Ohio State University/Nationwide Children's Hospital)

### **Post-Graduate Teaching**

**Post-doctoral Fellows- Lin Laboratory, University of Michigan (Dr. Lin as the mentor):** 8-16 contact hours per week

- 1998-1999 Yin Jin, M.D.
- 1999-2004 Xiaohong Jin, M.D.
- 2001-2004 Hui Song, M.D., Ph.D.
- 2001-2004 Huaijing Tang, M.D.

**Post-doctoral Fellows- Lin Laboratory, The Ohio State University (Dr. Lin as the mentor):** 8-16 contact hours per week

- 2005-2006 Chun-Liang Chen, Ph.D. (Currently is a faculty member in U of Texas)
- 2007 Ling Cen, Ph.D.
- 2008 ChangChing Wei, M.D. (Currently is a faculty member in another University in Taiwan)
- 2008-2011 Li Lin, M.D., Ph.D. (Currently is a faculty member in another University in China)
- 2009-2011 Yan Liu, Ph.D.
- 2009-2011 Aiguo Liu, M.D. (Currently is a faculty member in another University in China)
- 2013 Annie Yang, M.D., Ph.D.
- 2011-present Hui Xiao, M.D., Ph.D.
- 2013-present Xiaojuan Wu, M.D., Ph.D.
- 2015-present Cao Yang, M.D., Ph.D.
- 2015-present Nicki Lai, Ph.D.

### **Grant Support**

#### **Active Grants:**

- 6/01/2013 - 5/31/2018 Project 2: Co-I: Jiayuh Lin (15 %)  
Title: Studies of Childhood Sarcomas: Project 2: The Role of STAT3 Signaling in Childhood Sarcoma.



Funding Agency: NIH/NCI/P01 5 P01 CA 165995 -02  
Annual direct costs: \$88,000  
Total direct costs: \$44,000

02/01/2015 - 01/31/2017 PI: Jiayuh Lin (10 %)  
Title: Repositioning Bazedoxifene as a novel IL-6/GP130 inhibitor for sarcoma therapy  
Funding Agency: NIH/NCI R21 1 R21 CA 191751 -01  
Annual direct costs: \$125,000  
Total direct costs: \$275,000

6/01/2015 – 5/31/2020 PI: Jiayuh Lin (20 %)  
Title: A novel STAT3-selective inhibitor for medulloblastoma therapy  
Funding Agency: NIH/NINDS/R01 1R01NS087213-01A1  
Annual direct costs: \$125,000  
Total direct costs: \$275,000

### **Completed Grants:**

01/01/2015 – 12/31/2015 PI: Jiayuh Lin (0 %)  
Title: IL-6/STAT3 signaling for childhood cancer therapy  
Funding Agency: Department of Pediatrics, Ohio State University  
Annual direct costs: \$100,000  
Total direct costs: \$100,000

5/01/2015 – 1/30/2016 PI: Jiayuh Lin (0 %)  
Title: Combination of a MEK and STAT3 inhibitor for K-Ras mutant pancreatic and colon cancer therapy  
Funding Agency: The Ohio State University Comprehensive Cancer Center  
Annual direct costs: \$30,000  
Total direct costs: \$30,000

5/01/2013 - 4/30/2016 Co-Investigator: Jiayuh Lin (5%), PI: P. Houghton  
Title: Therapeutic Exploitation of Mutant BRAF for Astrocytoma.  
Funding Agency: NIH/NCI/R01  
Annual direct costs: \$7,500  
Total direct costs: \$30,000

01/14/2013 - 01/13/2015 Co-Investigator: Jiayuh Lin (5%), PI: M. Phelps  
Title: Optimizing selective in vivo inhibition of pancreatic tumor JAK2/STAT3 signaling.  
Funding Agency: NIH/NCI/R21  
Annual direct costs: \$5,524  
Total direct costs: \$11,048

7/01/2012 – 6/30/2014 PI: Jiayuh Lin (5 %)  
Title: STAT3 as a novel therapeutic target for childhood osteosarcoma  
Funding Agency: Alex's Lemonade Stand Foundation

Annual direct costs: \$100,000  
Total direct costs: \$200,000

01/01/2013 – 12/31/2013 PI: Jiayuh Lin (2 %)  
Title: A novel STAT3-selective small molecular inhibitor for cancer therapy.  
Funding Agency: Nationwide Children’s Hospital, Columbus OH  
Annual direct costs: \$50,000  
Total direct costs: \$50,000

9/15/2010-9/14/2013 Co-Investigator: Jiayuh Lin (5%), PI: C. Li  
Title: Novel small molecules disabling the IL-6/IL-6R/GP130 complex  
Funding Agency: The Congressionally Directed Medical Research Programs, Breast Cancer Research Program  
Annual direct costs: \$41,667  
Total direct costs: \$83,334

7/01/2011 - 6/30/2013 PI: Jiayuh Lin (0 %)  
Title: IL-6/STAT3 signaling pathway in human cancer cells.  
Funding Agency: Ohio State University Comprehensive Cancer Center and the Department of Pediatrics.  
Annual direct costs: \$30,000  
Total direct costs: \$30,000

7/01/2009 - 6/30/2011 Co-Investigator: Jiayuh Lin (3%), PI: Z. Liu  
Title: Reactivation of tumor suppressor genes in breast cancer by dietary supplements.  
Funding Agency: NIH/NCI/R21  
Annual direct costs: \$6,068  
Total direct costs: \$12,137

7/01/2009 - 6/30/2011 PI: Jiayuh Lin (5 %)  
Title: Dual Inhibitors Target JAK2 and STAT3 as a Novel Therapeutic Approach for Pancreatic Cancer.  
Funding Agency: American Association for Cancer Research. Pancreatic cancer innovation award.  
Annual direct costs: \$100,000  
Total direct costs: \$200,000

8/01/2009 - 7/31/2011 PI: Jiayuh Lin (5 %)  
Title: A novel curcumin analog as a new therapeutic agent in pancreatic cancer cells.  
Funding Agency: NIH/NCI/R03 R03CA137479-01A1  
Annual direct costs: \$50,000  
Total direct costs: \$100,000

3/01/2009 - 2/28/2011 PI: Jiayuh Lin (5 %)  
Title: STAT3 as a novel therapeutic target in pancreatic cancer cells.

Funding Agency: NIH/NCI/R21. R21CA133652-01A1  
Annual direct costs: \$125,000  
Total direct costs: \$275,000

01/01/2010 - 12/31/2010 PI: Jiayuh Lin (0 %)  
Title: STAT3 signaling pathway as a novel therapeutic target in human cancer cells.  
Funding Agency: The Ohio State University Comprehensive Cancer Center.  
Annual direct costs: \$10,000  
Total direct costs: \$10,000

7/01/2008 - 6/30/2010 Co-Investigator: Jiayuh Lin (5%), PI: T. Li  
Title: Small Molecule Inhibitors of STAT3 Dimerization for Prostate Cancer.  
Funding Agency: The Congressionally Directed Medical Research Programs, Prostate Cancer Research Program  
Annual direct costs: \$50,000  
Total direct costs: \$100,000

02/01/2008 - 01/31/2009 PI: Jiayuh Lin (0 %)  
Title: STAT3 signaling pathway in childhood cancers.  
Funding Agency: Circle of Friends Foundation.  
Annual direct costs: \$30,000  
Total direct costs: \$30,000

10/01/2007 - 9/30/2009 PI: Jiayuh Lin (5 %)  
Title: Inhibition of STAT3 by novel small molecule inhibitors in pancreatic cancer cells.  
Funding Agency: National Foundation for Cancer Research.  
Annual direct costs: \$50,000  
Total direct costs: \$100,000

5/01/2006 - 4/30/2008 PI: Jiayuh Lin (5 %)  
Title: Inhibition of STAT3 pathway by a novel non-peptide, cell-permeable small molecule inhibitor in breast cancer cells.  
Funding Agency: The Susan G. Komen Breast Cancer Foundation.  
Annual direct costs: \$125,000  
Total direct costs: \$250,000

10/01/2007 - 9/30/2008 PI: Jiayuh Lin (5 %)  
Title: Inhibition of STAT3 pathway by novel non-peptide, cell-permeable small molecule inhibitors in Glioblastoma cells.  
Funding Agency: The James S. McDonnell Foundation.  
Annual direct costs: \$100,000  
Total direct costs: \$100,000

3/01/2007 - 12/31/2008 PI: Jiayuh Lin (5 %)

Title: PDK-1/AKT pathway as a therapeutic target using a novel small molecular compound, OSU-03012 in childhood rhabdomyosarcoma.  
Funding Agency: Elsa U. Pardee Foundation.  
Annual direct costs: \$100,000  
Total direct costs: \$100,000

4/1/2004-3/31/2006

PI: Jiayuh Lin (5 %)  
Title: Evaluation of a novel AKT inhibitor in ovarian cancer.  
Funding Agency: NIH/NCI/R21  
Annual direct costs: \$125,000  
Total direct costs: \$275,000

8/1/2002-3/31/2006

PI: Jiayuh Lin (35 %)  
Title: Regulation of Stat3 by p53 in breast and ovarian cancer cells.  
Funding agency: NIH/NCI/R01 CA96714-01  
Annual direct costs: \$166,250  
Total direct costs: \$665,000

2/1/2003-1/31/2004

PI: Jiayuh Lin (5 %)  
Title: Inhibition of the AKT survival pathway by a novel AKT-selective small molecule inhibitor API-59 in human endometrial cancer cells.  
Funding Agency: S. Waxman Cancer Research Foundation  
Annual direct costs: \$100,000  
Total direct cost: \$ 100,000.

7/1/2003-6/30/2004

Co-Investigator: Jiayuh Lin (5%) PI: S Wang  
Title: Inhibition of the STAT3 pathway by novel small molecule inhibitors in human breast cancer cells.  
Funding Agency: DOD-Breast Cancer Research Program (DAMD17-03-1-0508)  
Annual direct costs: \$75,000  
Total direct cost: \$ 75,000

2/1/2001-1/31/2004

PI: Jiayuh Lin (40%)  
Title: Evaluation of a Modified p53 Tumor Suppressor Gene as Potential Gene Therapy for Human cancers.  
Funding Agency: Michigan Life Sciences Corridor Fund  
Annual direct costs: \$232,793  
Total direct cost: \$ 698,380.

1/1/2001-12/31/2002

PI: Jiayuh Lin (5 %)  
Title: STAT3 signaling in cancer cells  
Funding agency: Gustavus & Louise Pfeiffer Research Foundation  
Annual direct costs: \$75,000  
Total direct costs: \$150,000

8/1/2001-7/31/2002

PI: Jiayuh Lin (0 %)

Title: STAT3 signaling in cancer cells  
Funding agency: American Cancer Society Institutional Research Grant  
Annual direct costs: \$12,500  
Total direct costs: \$12,500

7/01/2000 - 8/31/2002

PI: Jiayuh Lin (5 %)  
Title: STAT3 pathway in sarcoma.  
Funding Agency: Elsa U. Pardee Foundation.  
Annual direct costs: \$70,000  
Total direct costs: \$140,000

8/1/2000-7/31/2002

PI: Jiayuh Lin (5 %)  
Title: STAT3 signaling in prostate cancer cells  
Funding agency: NIH/NCI Prostate SPORE Pilot Award through U. of Michigan.  
Annual direct costs: \$64,000  
Total direct costs: \$128,000

8/1/2000-7/31/2001

PI: Jiayuh Lin (0 %)  
Title: STAT3 signaling in cancer cells  
Funding agency: University of Michigan Comprehensive Cancer Center Idea grant  
Annual direct costs: \$15,000  
Total direct costs: \$15,000

8/1/1999-7/31/2000

PI: Jiayuh Lin (5 %)  
Title: STAT3 signaling in prostate cancer cells  
Funding agency: NIH/NCI Prostate SPORE Faculty Development Award through U. of Michigan.  
Annual direct costs: \$45,000  
Total direct costs: \$45,000

7/1/1999-6/30/2000

PI: Jiayuh Lin (0 %)  
Title: AKT signaling in cancer cells  
Funding agency: University of Michigan Research Pilot grant  
Annual direct costs: \$10,000  
Total direct costs: \$10,000

### **Patents, Inventions and Copyrights**

- 1993 U.S. Patent: Bristol-Myers Squibb Pharmaceutical Company: Test peptides interact with a mdm2 binding domain on p53 as potential treatments for cancer patients expressing high levels of mdm2.
- 2014 US Patent: Transcription Factor Inhibitors and Related Compositions, Formulations and Methods (LLL12 and its analogs).

### **Publications**

## Peer-reviewed journal articles

1. Lee, Y. -H. W., **J. Lin**, C. C. Pao, and S. J. Lo. Enhanced production of hepatitis B virus surface antigen in mouse C127 cell on a bovine papillomavirus-metallothionein vector. *Biochemistry International*. 16:101-109 (1988).
2. **Lin, J.**, and D. T. Simmons. Transformation by simian virus 40 does not involve the mutational activation of p53 to an oncogenic form. *Virology* 176:302-305 (1990).
3. **Lin, J.**, and D. T. Simmons. Stable T-p53 complexes are not required for replication of simian virus 40 in culture or for enhanced phosphorylation of T antigen and p53. *J. of Virology* 65:2066-2072 (1991).
4. **Lin, J.**, and D. T. Simmons. The ability of large T antigen to complex with p53 is necessary for the increased life span and partial transformation of human cells by SV40. *J. of Virology* 65:6447-6453 (1991).
5. **Lin, J.**, Chen, J., Elenbaas, B., and A. J. Levine. Several hydrophobic amino acids in the p53 N-terminal domain are required for transcriptional activation, binding to mdm-2 and the Adenovirus 5 E1B 55kd protein. *Genes & Development* 8:1235- 1246 (1994).
6. **Lin, J.**, Wu, X., Chen, J., Chang, A., and A. J. Levine. The functions of the p53 protein in growth regulation and tumor suppression. *Cold Spring Harbor Symp. Quan. Biol.* 59:215-223 (1994).
7. Sabbatini, P., **Lin, J.**, Levine, A. J., and E. White. Essential role for p53-mediated transcription in E1A-induced apoptosis. *Genes & Development* 9:2184-2192 (1995).
8. **Lin, J.**, Teresky, A., and A. J. Levine. Two critical hydrophobic amino acids in the N-terminal domain of the p53 protein are required for the gain of function phenotypes of human p53 mutants. *Oncogene* 10:2387 (1995).
9. Chen, J., **Lin, J.**, and A. J. Levine. The ability of mdm2 to complex with p53 is required for the inhibition of transcription activation and suppression activities of p53. *Molecular Medicine* 1:142-152 (1995).
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100. Zhao C, Li H, Lin HJ, Yang S, **Lin J**, Liang G. Feedback Activation of STAT3 as a Cancer Drug-Resistance Mechanism. ***Trends Pharmacol Sci.*** 37(1):47-61 (2016).
101. Wu X., Tang W., Marquez R., Li K., Highfill C., He F., Lian J., **Lin J.**, Fuchs J., Ji M., Li L., Xu L. Overcoming radiation resistance of pancreatic cancer by inhibiting STAT3 signaling. ***Oncotarget*** 7(10):11708-11723 (2016).
102. Zhao C., Wang W., Yu W., Jou D., Wang Y., Ma H., Qin H., Zhang C., Lu J., Sheng L., Li C., **Lin J.** and Lin L. A Novel Small Molecule STAT3 Inhibitor, LY5, Inhibits the cell viability,

colony formation, and migration of Colon and Liver Cancer Cells. *Oncotarget* 7(11):12917-12926 (2016).

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104. Epigenetic silencing of the NR4A3 tumor suppressor, by aberrant JAK/STAT signaling, predicts prognosis in gastric cancer. *Scientific Reports* 6:31690 (2016).
105. Wu X., Yang C., Xiao H., Li, C., **Lin, J.** Bazedoxifene as a Novel Inhibitor of IL-6/GP130 Signaling for Pancreatic Cancer therapy. *Molecular Cancer Therapeutics* Accepted for publication (2016).

### **Book Chapter**

**Lin J**, Jin X, Gossett D, Wang S. Inhibition of AKT oncogenic pathway in endometrial cancer Cells. Pages 139-149. Cell and Molecular Biology of Endometrial Carcinoma. Springer (2003).

### **Major Invited Speeches**

#### **Local**

**Invited as a seminar speaker at the Department of Internal Medicine, University of Michigan**

1. **Lin J.** “ STAT3 pathway in ovarian cancer “ (2001).
2. **Lin J.** “ Target endometrial and ovarian cancer cells with a novel AKT inhibitor “ (2003).

**Invited as a seminar speaker at the University of Michigan Comprehensive Cancer Center**

1. **Lin J.** “ STAT3 pathway in cancer” Cancer Biology seminar (2001).
2. **Lin J.** “ Regulation of STAT3 activity by p53 in cancer cells “Apoptosis seminar series (2002).
3. **Lin J.** “ Target STAT3 pathway in cancer cells” (2003).

**Invited as a seminar speaker at the Ohio State University:**

1. **Lin J.** STAT3 pathway in cancer cells (2004), Department of Laboratory Medicine.
2. **Lin J.** Phosphorylation profiles of tyrosine kinases, Department of Chemistry (2005).
3. **Lin J.** The STAT3 signaling pathway in cancer cells, Department of Molecular Virology, Immunology and Medical Genetics (2005).
4. **Lin J.** The STAT3 signaling pathways in human cancer cells, IBGP graduate program (2006).
5. **Lin J.** The inhibitory efficacy of curcumin analogues in cancer cells, Department of Internal Medicine (2008).
6. **Lin J.** The STAT3 pathway in cancer-initiating cells, IBGP graduate program (2013).
7. **Lin J.** IL-6/STAT3 signaling pathway in cancer, OSBP graduate program (2014)
8. **Lin J.** IL-6/STAT3 signaling pathway in cancer, MCDB graduate program (2014)
9. **Lin J.** IL-6/STAT3 signaling pathway in cancer, Department of Chemistry (2015)

**Invited as a seminar speaker at other Universities in the state of Ohio**

- 2000 **Lin J.** “ A modified p53 enhanced suppression activity in cancer cells expressing high levels of mdm2” , Department of Biochemistry and Molecular Biology, Wright State University, Dayton, OH.
- 2005 **Lin J.** Medical University of Ohio, Toledo, OH (presented seminar on STAT3 in cancer).
- 2007 **Lin J.** Ohio University, Athens, OH (presented seminar on STAT3 in cancer).

#### **National**

- 2000 **Lin J.** “ Stat3 pathway in cancer”, Wake Forest University, Winston-Salem, NC.
- 2000 **Lin J.** “ Stat3 pathway in cancer”, The Pennsylvania State University, Hershey, PA.
- 2000 **Lin J.** “ Targeting Stat3 pathway in cancer”, M.D. Anderson Cancer Center, Houston, TX.
- 2001 **Lin J.** Stat3 pathway in cancer”, Mount Sinai Medical Center, NY
- 2002 **Lin J.** “ Regulation of Stat3 activity by p53 in cancer cells “,Biology Department Seminar Series, Providence College, Providence, RI.
- 2002 **Lin J.** “ Target endometrial and ovarian cancer cells with a novel AKT inhibitor “, National Yang-Ming University, College of Medicine, Taipei, Taiwan.
- 2002 **Lin J.** “ A novel AKT inhibitor targets endometrial cancer cells with PTEN mutation“, International Symposium on Cell and Molecular Biology of Endometrial Carcinoma, Kitasato Institute & University, Tokyo, Japan.
- 2003 **Lin J.** “ Activation of AKT and Stat3 pathways in cancer cells”, University of Wisconsin, Madison, WI.
- 2009 **Lin J.** Indiana University Cancer Center, IN.
- 2010 **Lin J.** College of Pharmacy, University of Kentucky, Lexington, KY
- 2013 **Lin J.** Drexel University College of Medicine, Philadelphia, PA
- 2014 **Lin J.** West Virginia University, Morgantown, WV
- 2016 **Lin J.** NCI, 4<sup>th</sup> Pancreatic cancer Symposium, Bethesda, MD.

### **International**

- 2002 **Lin J.** “A novel AKT inhibitor targets endometrial cancer cells with PTEN mutation”, International Symposium on Cell and Molecular Biology of Endometrial Carcinoma, Kitasato Institute & University, Tokyo, Japan.
- 2002 **Lin J.** “Target endometrial and ovarian cancer cells with a novel AKT inhibitor”, National Yang-Ming University, College of Medicine, Taipei, Taiwan.
- 2012 **Lin J.** “IL-6/STAT3 signaling in cancer”.  
The German Cancer Research Center, Heidelberg, Germany

### **Proffered Communications**

#### **International scientific meetings held outside the United States**

- Lin, J.,** Wan, Y., Bata-Corsgo, Z., Talwar, H., Kang, S., Voorhees, J. J., and G. J. Fisher. (5/1998) UV rapidly activates cell surface receptors and three distinct MAP kinases in skin in vivo. *SID meeting, Cologne, Germany.*
- Song H., Wang S., Wang R., and **Lin J.** Targeting STAT3 pathway by small molecule compounds in breast carcinoma cells. An abstract was presented at the *Keystone Symposia- Jaks and Stats: Development to Disease* (British Columbia, 4/2004).
- Song H., Jin X., and **Lin J.** STAT3 modulates MEK5 expression in breast carcinoma cells. An abstract was presented at the *CFBS Annual Meeting (Cancer section)* (Vancouver, 5/2004).
- Lin Li, Hutzen B, Ball S, Zuo M, Foust E, DeAngelis S, Wei C, Peng Z, Li C, Fuchs J, Li P-K, Kulp S, Lin H-J L., Ihnat MA., Lesinski GB., Hoyt D , Termuhlen AM, Gross T, and **Lin J.** A novel small molecule exhibits potent growth suppressive activity through the inhibition of constitutive JAK2/STAT3 signaling in human cancer cells. The abstract was presented at the *TAT Annual Meeting* (Amsterdam, Netherland 2009).

#### **International scientific meetings held in the United States**

- Lin, J.**, and D. T. Simmons. (1990) The formation of stable T-p53 complexes is not required for replication of SV40 in culture. *Tumor virus meeting on SV40, polyoma, and adenoviruses*. (Cold Spring Harbor Laboratory).
- Lin, J.**, and D. T. Simmons. (1991) The ability of large T antigen to complex with p53 Is essential for the increased lifespan and partial transformation of human cells by SV40. *The fifth annual p53 workshop* (Princeton, NJ).
- Lin, J.**, Chen, J., Elenbaas, B., and A. J. Levine. (1994) Two critical amino acids in p53 protein are required for transcriptional activation by wt and mutant p53 proteins as well as the binding of mdm-2 and E1B 55kd oncogene products. *Cold Spring Harbor Laboratory Symposium "Molecular Genetics of Cancer "*.
- Lin, J.**, Chen, J., Elenbaas, B., and A. J. Levine. (1994) Several hydrophobic amino acids in the p53 N-terminal domain of p53 are involved in binding to mdm-2, Adenovirus 5 E1B 55kd protein, and for wild-type or mutant p53 transcriptional activation. *Tenth annual meeting on Oncogenes*.
- Lin, J.**, Chen, J., Elenbaas, B., Anwell Chang and A. J. Levine. (1994) Two critical amino acids in the N-terminal domain of p53 are required for transcriptional activation by wild-type and some mutant p53 as well as the binding of mdm-2 and AD 5 E1B 55kd oncogene products. *The 7th annual p53Workshop*.
- Page, C., H. Lin, V. K. Sondak, V. P. Castle, G. Jiang, K. R. Reynolds, and **J. Lin.** (2000) Evaluation of gene therapy with an adenovirus modified p53 vector in human cancer cells expressing high levels of mdm2 oncoprotein. An abstract was presented at the *AACR 91st Annual Meeting* (San Francisco).
- Huang M., Page, C., Changery, J. L., Cho K., Reynolds, K. R., and **J. Lin.** (2000) Expression of constitutive activation of AKT and Stat3 in ovarian, cervical, and prostate cancer cells. *AACR 91st Annual Meeting*.
- Page, C., Inohara, N., Nunez, G., Zhau, X., Day L. M., and **J. Lin.** (2000) Expression pro-apoptotic genes as competitive inhibitors to Bcl-2 and Bcl-X<sub>L</sub> in prostate cancer cells. *AACR 91st Annual Meeting*.
- Page, C., Lin, H., Sondak, V. K., Jiang, G. Castle, V., Reynolds, K. R., and **J. Lin.** (10/2000) A modified p53 overcomes mdm2 inhibition. *10th Annual p53 Workshop* (Monterey, CA).
- W. Burke, X. Jin, R. Liu, Y. Jiang, M. Huang, R. K. Reynolds, and **J. Lin.** Inhibition of constitutively active Stat3 pathway in ovarian cancer cells. An abstract was presented to the *AACR 92nd Annual Meeting* (New Orleans-2001).
- J. Lin.** X. Jin, W. Burke, K. Kothman, and R. K. Reynolds. Inhibition of p53 apoptotic in cancer cells. An abstract was presented to the *AACR 92nd Annual Meeting* (New Orleans-2001).
- Reid, T. Song, H. R. K. Reynolds, and **J. Lin.** Inhibition of JAK1/2 and Stat3 pathways by p53 tumor suppressor in human ovarian cancer cells. An abstract was presented at the *AACR 93rd Annual Meeting* (San Francisco-2002).
- Tang H., Jin X., Wang S., Yang D., Gossett D., and **Lin J.** A novel small molecular inhibitor inhibits AKT pathway in ovarian cancer cells. An abstract was presented at the *AACR Annual Meeting* (Washington D. C., 2003).
- Jin X., Gossett D., Wang S., Yang D., Reynolds RK., and **Lin J.** Inhibition of the AKT survival pathway by a novel AKT inhibitor in endometrial cancer cells. An abstract was presented at the *AACR Annual Meeting* (Washington D. C., 2003).
- Song H., Wang S., Wang R., and **Lin J.** Inhibition of STAT3 oncogenic pathway by a novel non-peptide small molecule inhibitor in human breast cancer cells. An abstract was presented at the *AACR Advances in Breast Cancer Research Meeting* (CA, October 2003).

- Song H., Wang S., Wang R., and **Lin J.** Inhibition of STAT3 pathway by a novel small molecule inhibitor in cancer cells. An abstract was presented at the *AACR Annual Meeting* (Orlando, 4/2004).
- Song, H, Hsieh F, and **Lin J.** Evaluation of the Stat3-regulated genes in breast cancer. An abstract was presented at the *AACR Annual Meeting* (Anaheim, CA 2005).
- Lin, H., Song, H., Hsieh F, and **Lin J.** Studies of phosphorylation on receptor and non-receptor protein kinases in human breast cancer. An abstract was presented at the *AACR Annual Meeting* (Anaheim, CA 2005).
- Cen L., Hsieh F, Lin H., Chen, C. S., Qualman SJ, and **Lin J.** Phosphorylation profile of protein kinases in PDK-1/AKT pathway and the effect of PDK-1 inhibitor in rhabdomyosarcomas. The abstract was presented at the *AACR Annual Meeting* (Washington D. C. 2006).
- Chen C., Loy A., Hsieh F., Gong Cheng, Qualman SJ, Hall B., and **Lin J.** Activation of Stat3 pathway in human rhabdomyosarcoma, osteosarcoma and soft-tissue sarcoma. The abstract was presented at the *AACR Annual Meeting* (Washington D. C 2006).
- Fuh B., Chen C., Wang S., and **Lin J.** Inhibition of Bcl-2/Bcl-X<sub>L</sub> by a small molecular inhibitor in rhabdomyosarcomas cells. The abstract was presented at the *AACR Annual Meeting* (Washington D. C 4/2006).
- Hutzen B., Fuh B., Chan C., Sobo M., Li C., Li P., and **Lin J.** A novel Stat3 inhibitor suppresses cancer cell growth and induces apoptosis in human pancreatic, breast, and brain tumor cells. The abstract was presented at the *AACR Annual Meeting* (San Francisco 2007).
- Lieblein JC., Sasser K., Huang Tim H-M., Lin H., and **Lin J.** STAT3 is activated through paracrine signaling in the breast tumor microenvironment and is mediated through IL-6. The abstract was presented at the *AACR Annual Meeting* (San Francisco 2007).
- Chen C., Loy A., Hsieh F., Cheng G., Wu B., Kunisada K., Yamauchi-Takahara K., and **Lin J.** Inhibition of constitutive Stat3 pathway suppresses cancer cell growth and induces apoptosis in human bladder cell lines. The abstract was presented at the *AACR Annual Meeting* (San Francisco 2007).
- Lieblein JC., Ball S, Hutzen B., Lin Z., and **Lin J.** Paracrine signaling from the breast cancer cells stimulates the cell proliferation and Stat3 phosphorylation in non-cancerous mammary epithelial cells and is blocked by dietary agent, curcumin. The abstract was presented at the *Sixth Annual AACR International Conference: Frontiers in Cancer Prevention Research* (Philadelphia, PA, 12/2007).
- Cen L, Deangelis S, Willis W, Ball S, Jones S, Chan C, Fuh B, and **Lin J.** The inhibitory effects of dietary agents in pancreatic and colon cancer cells. The abstract was presented at the *Sixth Annual AACR International Conference: Frontiers in Cancer Prevention Research* (Philadelphia, PA, 12/2007).
- Hutzen B., Cen L., Friedman L., Sobo M., Ball S., Li P., Li C., Fuchs J., Bhasin D., Pandit B., Shibata H., Iwabuchi Y., and **Lin J.** New curcumin analogues with enhanced growth suppressive activity in cancer cells. The abstract was presented at the *AACR Annual Meeting* (San Diego, CA 2008).
- Fossey S, Liao L, Bear M, **Lin J,** Li P-K, Kisseberth W, London, C. Investigating the role of STAT3 dysregulation in human and canine osteosarcoma. The abstract was presented at the *AACR Annual Meeting* (San Diego, CA 2008).
- Lin L, Hutzen B, Ball S, Foust E, DeAngelis S, Zuo M, Peng Z, Li C, Fuchs J, Li P-K, Lesinski GB, Kulp S, Lin H-J L, Ihnat MA, Hoyt D, Termuhlen AM, Gross T, and **Lin J.** A novel small molecule exhibits potent growth suppressive activity through the inhibition of constitutive JAK2/STAT3 signaling in breast, pancreatic cancer, and glioblastoma cells. The abstract was presented at the *AACR Annual Meeting* (Denver, CO 2009).

- Lesinski GB, Bill MA, Li C, Fuchs F, Kulp S, Ihnat M, **Lin J**, Hoyt D, Young G, Carson III WE, Li P-K. The small molecule curcumin analog FLLL-32 induces apoptosis in human melanoma cells via STAT3 inhibition and elicits in vivo anti-tumor activity. The abstract was presented at the *AACR Annual Meeting* (Denver, CO 2009).
- Lesinski, GB, Bill, Bakan C, Benson DM Jr., Schwartz EB, **Lin J**, Hoyt DG, Fossey SL, Young GS, Carson WE III, Li P-K. Small molecule curcumin analogs induce apoptosis in human melanoma cells via STAT3 inhibition but do not alter the cellular response to immunotherapeutic cytokines. The abstract was presented at The International society for biologic therapy of cancer annual meeting (Washington DC 2009).
- Bill MA, Fuchs JR, Li C, Schwartz EB, **Lin J**, Hoyt DG, Foor B, Otterson D, Yui J, Carson WE III, Li P-K, Lesinski GB. STAT3-specific small molecule curcumin analogs FLLL32 and FLLL62 induce apoptosis and enhance the direct anti-tumor effect of interferons. The abstract was presented at The International society for biologic therapy of cancer annual meeting (Washington DC 2009).
- Lin L., Hutzen B, Peng Z., Lin H., Li P-K., Li C., Wicha M., and **Lin J**. STAT3 as a novel therapeutic target in human breast cancer stem cells. The abstract was presented at the *EORTC-NCI-AACR International Symposium on Molecular Targets and Cancer Therapeutics Annual Meeting* (Boston, MA 2009).
- Zuo, Lin L. Li C, Li P-K, and **Lin J**. STAT3 as a chemoprevention target in liver cancer cells. The abstract was presented at the *Sixth Annual AACR International Conference: Frontiers in Cancer Prevention Research* (Houston, TX, 12/2009) **Received an AACR travel award.**
- Liu Y., Li C., Li Pui-Kai, **Lin J**. A small molecule, LLL12, inhibits IL-6 induced STAT3 phosphorylation and nuclear translocation. The abstract was presented at the *AACR Annual Meeting* (Washington D. C. 2010). **Received an AACR travel award.**
- Lin L., Hutzen B, Peng Z., Lin H., Li P-K., Li C., Wicha M., and **Lin J**. STAT3 is required for survival of human breast cancer stem cells. The abstract was presented at the *AACR Annual Meeting* (Washington D. C. 2010). **Received an AACR top-rated abstract award.**
- Lin L., Li C., Li P-K., Fuchs J., and **Lin J**. STAT3 as a novel cancer therapeutic target in colorectal cancer stem cells. The abstract was presented at the *AACR Colorectal Cancer: Biology to Therapy Meeting* (Philadelphia, PA, 10/2010). **Received an AACR travel award.**
- Tang A., Abuzeid, WM, Chinn S., Jones T., Davis S., **Lin J**, Fuchs J., Bradford C., Carey T., Prince M. Targeting Cancer stem cells through STAT3 inhibition in head and neck cancers. The abstract was presented at the *AACR Annual Meeting (Orlando, Florida 2011)*.
- Lin L., Li P-K., Fuchs J., Li C, and **Lin J**. STAT3 is necessary for proliferation and survival in pancreatic cancer-initiating cells. The abstract was presented at the *AACR Annual Meeting (Orlando, Florida 2011)*.
- Liu A., Liu A., Xu, Z., Yu W., Wang H., Li C., **Lin J**. A novel small molecule, XZH-5 inhibits constitutive and interleukin-6-induced STAT3 phosphorylation in human rhabdomyosarcoma cells. The abstract was presented at the *AACR Annual Meeting (Orlando, Florida 2011)*.
- Liu A., Xu M., Li H., Zhao Z., McWilliams E., Xu Y., Li C., and **Lin J**. Novel drug development approach targeting STAT3 for sarcoma therapy using MLSD and drug reposition. The abstract will be presented at the *EORTC-NCI-AACR International Symposium on Molecular Targets and Cancer Therapeutics Annual Meeting* (San Francisco, CA 2011).
- Lin, L., Li, H., Xu, M., Zhao, Z., Olson, V., Xu, Y., Li, C., **Lin, J**. Novel drug discovery approach targeting STAT3 for breast cancer therapy using MLSD and drug repositioning. This abstract was presented at the *AACR Annual Meeting* (Chicago, IL 2012).
- Bid, H.K., Oswald, D., Li, C., **Lin, J**, Houghton, P.J. Direct anti-angiogenic activity of a small molecular STAT3 inhibitor LLL12. This abstract was presented at the *AACR Annual Meeting* (Chicago, IL 2012).



- Bid H., Kibbler A., Phelps D., Manap S., Xiao L., **Lin J.**, Capper D., Oswald D., Geier B., DeWire M., Smith P., Kurmasheva R., Mo X., Fernandes S., Houghton P. Development, Characterization, and Reversal of Acquired Resistance to the MEK1 Inhibitor Selumetinib (AZD6244) in an In Vivo Model of Childhood Astrocytoma. This abstract was presented at the *AACR Annual Meeting* (Washington D. C. 2013).
- Xiao H., Yu W., Olson, V., Li, C., Houghton P., **Lin, J.** A novel small molecule, LY5 selectively inhibits STAT3 phosphorylation and activities and exhibits potent growth suppressive activity in cancer cells. This abstract was presented at the *AACR Annual Meeting* (Washington D. C. 2013).
- Xiao H., Bian Y., Joe D., Li H, Lin L, Li C., and **Lin, J.** GP130 as a novel therapeutic target in IL-6-dependent cancers. This abstract was presented at the *AACR Annual Meeting* (San Diego, CA 2014).
- Yang J, Keenan K, Mace T, Bekaii-Saab T, Fuchs J, Schwartz E, Li C, **Lin J**, Li P, Lesinski G. STAT3 inhibitors elicit direct anti-tumor effects against human biliary cancer cell lines and limit release of immune suppressive cytokines *in vitro*. This abstract was presented at the *AACR Annual Meeting* (San Diego, CA 2014).
- Wu X., Xiao H., Li, C., **Lin, J.** Persistent STAT3 signaling contributes to the resistance of anti-cancer drugs doxorubicin and cisplatin, and MEK inhibitor AZD6244 in childhood sarcoma cells. This abstract was presented at the *AACR Annual Meeting* (Philadelphia, PA 2015).
- Wu X., Xiao H., Li, C., **Lin, J.** Bazedoxifene as a novel inhibitor of IL-6/GP130 signaling for pancreatic cancer therapy. This abstract was presented at the EORTC-NCI-AACR International Symposium on Molecular Targets and Cancer Therapeutics Annual Meeting (Boston, MA 2015).
- Yang C., Li, C., **Lin, J.** Dual inhibition of STAT3 and IL-8 pathways as a novel therapeutic approach in osteosarcoma. This abstract was presented at the *AACR Annual Meeting* (New Orleans, LA 2016).

## **National**

- Lin, J.**, Reichner, C., and A. J. Levine. (1995) Analysis of wild-type and mutant p21<sup>WAF1</sup> activities in cyclins-cdks binding and growth suppression of tumor cells. *Cancer Genetics and Tumor Suppressor Genes*.
- Page, C., H. Lin, V. K. Sondak, G. Jiang, V. Castle, K. R. Reynolds, and **J. Lin.** (1999) Gene therapy with a modified p53 overcomes mdm2-mediated oncogenic transformation. *Oncogene and growth Control Meetings* (The Salk Institute, La Jolla, CA).
- Page, C., H. Lin, V. K. Sondak, G. Jiang, V. Castle, K. R. Reynolds, and **J. Lin.** (1999) Novel cancer gene therapy with a modified p53. *AACR-NCI-EORTC Molecular Targets and Cancer Therapeutic Meeting*. The abstract was published in the November supplement to *Clinical Cancer Research*.
- Lilja, J., Wu, D., Page, C., Reynolds, K. R., Dixon, J., and **J. Lin.** (2000) Growth suppression activity of PTEN tumor suppressor gene. An abstract was presented at the *Annual SGO Meeting* (San Diego).
- Page, C., H. Lin, M. Huang, R. Liu, V. Castle, K. R. Reynolds, and **J. Lin.** (2000) The role of AKT oncogene in ovarian cancers. An abstract was presented at the *Annual SGO Meeting* (San Diego, CA).
- W. Burke, M. Huang, X. Jin, R. Liu, R. K. Reynolds, and **J. Lin.** Inhibition of constitutively active Stat3 pathway in ovarian cancer cells. An abstract was presented in the *SGO Annual Meeting* as an oral presentation for a focused plenary section on cell cycle regulation (Nashville-2001).

- J. Lin.** X. Jin, W. Burke, K. Kothman, and R. K. Reynolds. Inhibition of the p53 pathway in ovarian cancer cells. An abstract was presented by the *SGO Annual Meeting* (Nashville-9/2001).
- Jin, X. Burke, W. R. K. Reynolds, and **J. Lin.** Inhibition of Stat3 By p53 in breast cancer cells. An abstract was presented at the *SGO Annual Meeting* (Miami-9/2002).
- Reid, T. Song, H. R. K. Reynolds, and **J. Lin.** Inhibition of JAK1/2 and Stat3 pathways by p53 tumor suppressor in human ovarian cancer cells. An abstract was presented at the *SGO Annual Meeting* (Miami-2002).
- Tang H., Jin X., Wang S., Yang D., Gossett D., and **Lin J.** A novel small molecular inhibitor inhibits AKT pathway in ovarian cancer cells. *SGO Annual Meeting* (New Orleans-9/2003).
- Jin X., Wang S., Yang D., Gossett D., Reynolds RK., and **Lin J.** Inhibition of the AKT survival pathway by a novel AKT-selective inhibitor in endometrial cancer cells. An abstract was presented at the *SGO Annual Meeting* (New Orleans-9/2003).
- Gossett D, Bradley M, Jin X, and **Lin J.** 17-Allyamino-17-Demethoxygeldanamycin and 17-NN-Dimethyl Ethylene Diamine-Geldanamycin have cytotoxic activity against multiple gynecologic cancer cell types. An abstract was presented at the *molecular Targets for Cancer Therapy meeting* (Tampa, 10/2004).
- Hsieh F, Qualman SJ, and **Lin J.** Evaluation of the Stat3 activation in human osteosarcoma. An abstract was presented at the *PAS annual meeting* (Washington D. C., 5/2005).
- Cen L., Arnoczky K., Hsieh F, Lin H., Qualman SJ, and Lin J. Phosphorylation profiles of protein kinases in human rhabdomyosarcomas. *Clinical Cancer Research*. 11(24 Suppl.):9110s, 2005.
- Cen L., Arnoczky K., Hsieh F, Lin H., Qualman SJ, and **Lin J.** Phosphorylation profiles of protein tyrosine kinases in human rhabdomyosarcomas. The abstract was presented at the *Connective Tissue Oncology Society Annual Meeting* as an oral presentation (Boca Raton, FL 2005).
- Chen C., Loy A., Hsieh F., Gong Cheng, Qualman SJ, Hall B., and **Lin J.** Activation of Stat3 pathway in human rhabdomyosarcoma, osteosarcoma and soft-tissue sarcoma. An abstract was presented at the *PAS annual meeting* (San Francisco 5/2006).
- Cen L., Hsieh F, Lin H., Chen, C. S., Qualman SJ, and **Lin J.** Phosphorylation profile of protein kinases in PDK-1/AKT pathway and the effect of PDK-1 inhibitor in rhabdomyosarcomas. The abstract was presented at the *PAS annual meeting* (San Francisco 5/2006).
- Fuh B., Chen C., Wang S., and **Lin J.** Inhibition of Bcl-2/Bcl-X<sub>L</sub> by a small molecular inhibitor in rhabdomyosarcomas cells. An abstract was presented at the *PAS annual meeting* (San Francisco 5/2006).
- Yang E., Kim S, Donovan EL, Chen M, Beickelman A, Hutzen B J, **Lin J**, Barsky SH, and Glaser, R. Norepinephrine upregulates VEGF, IL-6, and IL-8 expression in human melanoma tumor cell lines: implications for stress-related enhancement of tumor progression. The abstract will be presented at the *Psychoneuroimmunology Research Society Annual Meeting* (Madison, WI 2008).
- Fossey SL, Liao AT, Bear MD, **Lin J**, Li PK, Kisseberth WC, and London CA. Annual Meeting of The American College of Veterinary Pathologists. "Investigating the Role of STAT3 Activation in Human and Canine Osteosarcoma." (November 10-14, 2007), Savannah, GA.
- Fuchs J, Etter J, Li P, Abdelhamid D, Regan N, Bhasin D, Pandit B, Li C, Cisek K, Cen L, Hutzen B, and **Lin L.** Synthesis and antiproliferative activity of curcumin analogues. The abstract will be presented at the American Chemical Society National Meeting & Exposition (Philadelphia, PA, August 17-21, 2008).
- Lin L., Hutzen B, Peng Z., Lin H., Li P-K., Li C., Wicha M., and **Lin J.** STAT3 as a novel therapeutic target in human breast cancer stem cells. The abstract was presented at The International society for biologic therapy of cancer annual meeting (Washington DC 2009).

- Lin L, Zuo M, DeAngelis S, Li C, Li P-K, and **Lin J**. Target constitutive STAT3 pathway in Glioblastoma cells with a novel small molecular STAT3 inhibitor. The abstract was presented at the *AACR Brain Tumor Meeting* (San Diego, CA 12/2009).
- Ball S, Li C, Li P-K, and **Lin J**. Target constitutive STAT3 signaling in human medulablastoma cells with a novel small molecular STAT3 inhibitor. The abstract was presented at the *AACR Brain Tumor Meeting* (San Diego, CA 12/2009).
- Abuzeid WM, Davis S, Tang A, Saunders L., **Lin J**, Fuchs J., Bradford CR., Carey TE. Sensitization of head and neck cancer to cisplatin through the inhibition of STAT3. The abstract was presented to the *American Head and Neck Society Annual Meeting* (Las Vegas, NV 2010).
- Bill, M., Nicholas, C., Mace, T., He, L., Ling, Y., Phelps, M., Li, C., Schwartz, E., Fuchs, J., Lin, L., **Lin, J.**, London, C., Young, G., Li, P-K., Lesinski, G. A novel bioavailable small molecule curcumin analog FLLL100-P inhibits STAT3 signaling and induces apoptosis in melanoma cells. The abstract was presented at the *Society for Immunotherapy of Cancer (SITC) Annual Meeting* (Bethesda, Maryland 2011).
- Rozewski D, Cho Y, Mace T, He L, Schwartz E, Ling Y, Bill M, London C, **Lin J**, Li C, Fuchs R, Lesinski G, Phelps M. Comprehensive pharmacokinetic-pharmacodynamic modeling to optimize FLLL100P-induced inhibition of pSTAT3 in pancreatic cancer. This abstract was presented at The Great Lakes Drug Metabolism and Disposition Group Annual Meeting (Indianapolis, IN 2014).
- Ling Y, Zhu X, Rozewski D, Bear M, **Lin J**, Li C, Li P, London C, Phelps M. Pharmacokinetic evaluation of STAT3 inhibitors LLL12 and LY5 in Mice. This abstract was presented at the Annual American Pharmaceutical Scientist meeting and symposium (San Diego, CA 2014).
- Wu X., Xiao H., Li, C., **Lin, J**. Persistent STAT3 signaling contributes to the resistance of anti-cancer drugs doxorubicin and cisplatin, and MEK inhibitor AZD6244 in childhood sarcoma cells. This abstract was presented at the American Society for Cell Biology Annual Meeting (Philadelphia, PA 2014).
- Wu X., Xiao H., Li, C., **Lin, J**. Bazedoxifene as a novel inhibitor of IL-6/GP130 signaling for pancreatic cancer therapy. This abstract was presented at the 3rd NCI-Pancreatic Cancer Symposium (Bethesda, MD 2015).

## **Local and Institutional**

### **Seminars presented at the University of Michigan:**

#### ***Department of Obstetrics and Gynecology, University of Michigan***

1. **Lin, J.** “ Overexpressing of AKT confer taxol-resistant phenotype in ovarian cancer cells “ (1999).
2. **Lin, J.** “ A modified p53 enhanced suppression activity in cancer cells expressing high levels of mdm2” (2000).
3. **Lin, J.** “ STAT3 pathway in ovarian cancer “ (2000).
4. **Lin, J.** “Cancer gene therapy using a modified adenovirus p53 in sarcoma cells “ (2001).
5. **Lin, J.** “ Apoptotic activity of pro-apoptotic genes in prostate cancer ” (2001).
6. **Lin, J.** “ Regulation of STAT3 activity by p53 in cancer cells “ (2002).
7. **Lin, J.** “ Target endometrial cancer with AKT inhibitor “ (2002).
8. **Lin, J.** “ STAT3 regulated genes in breast epithelial cells. (2004).

#### ***PIBS New Faculty Lunch Series, University of Michigan***

**Lin, J.** Activation of STAT3 pathway in cancer cells (2003).

#### ***University of Michigan RSDP Program***

**Lin, J.** Regulation of STAT3 pathway in cancer cells (2004).

***University of Michigan Comprehensive Cancer Center***

1. **Lin, J.** “ Apoptotic activity of pro-apoptotic genes in prostate cancer “ Prostate SPORE (2001).
2. **Lin, J.** “Cancer gene therapy using a modified adenovirus p53 in cancer cells expressing high levels of mdm2” (2001).

**Seminars presented at the Ohio State University:**

***The Department of Pediatrics, The Ohio State University***

1. **Lin, J.** STAT3 signaling pathway in cancer cells (2004).
2. **Lin, J.** STAT3 pathway in cancer (2007).
3. **Lin, J.** Targeting STAT3 in cancer cells (2009)
4. **Lin, J.** STAT3 in childhood cancer (2009)
5. **Lin, J.** IL-6/STAT3 signaling pathway in cancer (2014)
6. **Lin, J.** IL-6/GP130/STAT3 signaling as a cancer therapeutic target in sarcoma cells (2015)

***IBGP, The Ohio State University***

1. **Lin, J.** The STAT3 pathway in human cancer (2007).
2. **Lin, J.** STAT3 signaling pathway in cancer (IBGP8510: 2013).

***Department of Internal Medicine, The Ohio State University***

1. **Lin, J.** The inhibitory efficacy of LLL12 in breast cancer stem cells at OSUMC (2009).
2. **Lin, J.** Curcumin analogs as chemoprevention agents to target STAT3 at OSUCCC Cancer Prevention program (2010).

**Seminar presented at the University of Maryland School of Medicine in Baltimore:**

***The Department of Surgery, University of Maryland***

- Lin, J.** IL-6/STAT3 signaling pathway in mesothelioma (2016)