

Curriculum Vitae

I. Generation Information

1. Personal information

Name: Chuxia Deng
Place of Birth: Luzhou, Sichuan, P.R. China
Citizenship: USA
Home Address: Flat 8B, S30, Staff Quarters, University of Macau
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2. Education

1978.3-1982.1: B.S. Department of Biology, West-China Normal University
P.R. China
1982.1-1984.12: M.S. Institute of Hydrobiology, Academia Sinica
M.S. Thesis: Susceptibility to grass carp reovirus of several cell
lines derived from grass carp.
Thesis advisor: Hongqi Chen
1986.9-1992.5: Ph. D. Department of Biology, University of Utah, Salt Lake City
Ph. D. Thesis: Gene targeting in murine embryonic stem cells:
frequencies, mechanisms and mouse mutants.
Thesis advisor: Mario R. Capecchi
Dr. Capecchi received Nobel Prize of Physiology or Medicine of
2007 for his work in gene targeting. In his Nobel Lecture on Dec 7,
2007, he mentioned my work in his lab as a graduate student (Fig
8).
1992.7-1995.5: Postdoctoral fellow. Genetics Dept., Harvard Medical School,
Boston
Advisor: Philip Leder
(Dr. Leder received Lasker Award in 1987 and National Medal of
Science in 1991)

3. Professional positions and research experiences

2014.12-present: Founding Dean and Chair Professor, Faculty of Health Sciences,
University of Macau, Macau, SAR, China
Director, Cancer Center, Faculty of Health Sciences, University of
Macau, Macau, SAR, China
2000.3-2014.12: Senior Investigator, Senior Biomedical Research Service (SBRS)
Chief, Mammalian Genetics Section
Genetics of Development and Disease Branch
Research areas: BRCA1-associated breast cancer; p53; Sirtuins; Cancer
and metabolic diseases; Cancer and aging; Cancer stem cells
1995.5-2000.3: Investigator (Tenure-Track)

- Laboratory of Biochemistry and Metabolism
National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH).
Research areas: FGF/FGF receptor, TGF β /SMADs signaling, *Brcal*, p53 tumor suppressor genes
- 1992-1995.5: Associate, Howard Hughes Medical Institute, Fellow, Genetics Department, Harvard Medical School.
Research areas: oncology, developmental biology and gene targeting
- 1986-1992: Dept. of Biology, University of Utah.
Research areas: gene targeting, site-specific recombination and developmental biology
- 1982-1986: Institute of Hydrobiology, Academia Sinica.
Research areas: fish developmental genetics and virology

II. Teaching

1. Teaching experience

- 2000-2020: Have served in the Thesis Committee for over 40 Ph.D students;
Serve as supervisor for over 20 Ph.D. students.
- 2012-2014: Teaching faculty for an annual class of about 30 students for Transgenic Technology in NIH.
Topics: Transgenics, and Gene Targeting.
- 2014-present: Design and arrange curriculums for undergraduates and postgraduates;
Serve as a teaching faculty for an undergraduate program of about 150 students and a Ph.D program of about 250 students in FHS, UM.
Classes taught: Genetics, Stem Cells, Cancer Biology, and Molecular Technology.

2. Honors related to laboratory activities

Seventeen postdoctoral fellows (23 times) received NIH-wide “Fellows Award for Research Excellence” (FARE) from 1999-2012. They are listed below:

- 2012: One (Dr. Cris Chisholm)
2011: One (Dr. Guelaguetza Vazquez-Ortiz).
2010: One (Dr. [Cristine Chisholm](#)).
2009: One (Dr. Thanassios Vassilopoulos).
2008: Two (Drs. Mi-Hye Lee and Vivek Shukla).
2007: Two (Drs. Cuiying Xiao and Thanassios Vassilopoulos).
2006: One (Dr. Joseph De Soto).
2005: One (Dr. Yohei Tominaga).
2004: Two (Drs. Liu Cao and Xavier Coumoul).
2003: Three (Drs. Liu Cao, Sangsoo Kim and Xiaoyan Wang).
2002: One (Dr. Liu Cao).
2001: Two (Drs. Lin Chen and Xiaoling Xu).
2000: Three (Drs. Yong-Xing Zhou, Lin Chen and Cuiling Li).
1999: Three (Drs. Michael Weinstein, Lin Chen and Cuiling Li).

One postdoc (Dr. Lin Chen) received “Young Investigator Award” and “Travel Award” from The American Society for Bone and Mineral Research, 1998.

Since 1995, I have mentored over 40 summer students who moved on to College, Graduate schools, or Medical Schools.

-Six Summer students who received scientific training in my lab received Semi Finalist Award for USA “Siemens Competition in Math, Science & Technology”.

-Four summer students who received scientific training in my lab received Semi Finalist Award for USA “Intel International Science and Engineering Fair”.

Both Intel and Siemens are highest awards in their field for talented high school students. scientific awards for high school students: Intel or Siemens. Each Award only gives to 300 students each year.

3. Trainee’s positions

I have also mentored >30 former postdoctoral fellows. Following is a partial list of people who have taken academic positions after leaving my laboratory.

	Name	Position	Affiliation
1	Michael Weinstein, Ph.D.	Associated professor	Department of Molecular Genetics, Division of Human Cancer Genetics, The Ohio State University 484 West 12th Avenue, Columbus, OH 43210, USA
2	Xiao Yang, Ph.D.	Full professor	Chief, Genetic Laboratory of Development and Diseases, Institute of Biotechnology, Beijing, China
3	Lin Chen, MD	Full professor	Head, State Key Laboratory of Trauma Medicine, Department of Clinical Biological Technology, Third Military University, Chongqing, 400042 P. R. China.
4	Yuying Li, MD	Associate professor	Laboratory of Respiratory Biology Third Military University, Chongqing, 400042 P. R. China.
5	Yong-Xing Zhou, Ph.D. MD	Research Assistant Professor	Program in Molecular and Cell Biology Uniformed Services University of the Health Sciences Bethesda, Maryland, USA
6	Steven G. Brodie, Ph.D	Assistant professor	Department of Pathology, School of Medicine, University of New Mexico, Health Sciences Center, 915 Camino de Salud, N.E., Albuquerque, New Mexico 87131
7	Sangsoo Kim, Ph.D	Principal Investigator	Radiation Medicine Division, National Cancer Center 809 Madul-dong, Ilsandong-gu, Goyang-si, Gyeonggi-do, 410-769, Republic of Korea
8	Xavier Coumoul, Ph.D	Senior Lecturer	INSERM UMR-S 747, Université Paris Descartes 45 rue des Saints-Pères, 75006 Paris FRANCE
9	Joseph A. De Soto MD, PhD, FAIC	Assistant Professor	Laboratory of Experimental Therapeutics & Cancer Chemotherapy, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA
10	Tomoko Iwata, Ph.D	Assistant Professor	Division of Cancer Sciences and Molecular Pathology Faculty of Medicine, University of Glasgow Beatson Laboratories for Cancer Research, Glasgow, UK
11	Liu Cao, M.D., Ph.D.	Professor & Chairman	Key Laboratory of Medical Cell Biology, Ministry of Education & Public Health of China, China Medical University, Shengyang, China

12	Hyun-Seok Kim, Ph.D.	Assistant professor	Dept. of Life Science, College of Natural Science Ewha Womans University, Seoul, South Korea
13	Athanassios Vassilopoulos, Ph.D.	Assistant professor	Department of Radiation Oncology, Robert H. Lurie Comprehensive Cancer Center, Feinberg School of Medicine, Northwestern University, Chicago, Illinois
14	Cuiying Xiao, Ph.D	Staff Scientist	NIDDK, NIH, Bethesda, Maryland, USA
15	Vivek Shukla, Ph.D	Staff Scientist	NCI, NIH, Bethesda, Maryland, USA
16	Qiang Chen, Ph.D	Senior Instructor	Faculty of Health Sciences, University of Macau, Macau, SAR, China
17	Xiaoling Xu, Ph.D	Associate Professor	Faculty of Health Sciences, University of Macau, Macau, SAR, China
18	Ruihong Wang, Ph.D	Associate Professor	Faculty of Health Sciences, University of Macau, Macau, SAR, China
19	Ada Wong, Ph.D	Macau Fellow	Faculty of Health Sciences, University of Macau, Macau, SAR, China
20	Kai Miao, Ph.D	Research Assistant Professor	Faculty of Health Sciences, University of Macau, Macau, SAR, China

III. Leadership and Administrative Experience

1. Administrative experience

12/1/2014-present: Founding Dean, Faculty of Health Sciences (FHS), University of Macau (UM), Macau.

During the past 7 years, I have built up, from scratch, an excellent academic environment and recruited an outstanding research team consisting over 400 scientists, including 41 faculty members [Senior Instructors (5), Research Assistant Professors (2), Assistant Professors (8), Associate Professors (13), Full Professors (9), Distinguished Professors (1) and Chair Professors (3)], over 25 Guest/Visiting Professors, >300 Ph.D students, >50 Master Students, and over 100 postdoctoral fellows/technicians.

Currently, FHS has established 4 research Centers/Institute: Cancer Center (CC), Centre of Reproduction, Development and Aging (CRDA), Center for Precision Medicine Research and Training (CPMRT), and Institute of Translation Medicine (ITM). We mainly focus on cancer, aging, diabetes, neurodegenerative diseases, reproduction, development, and infectious Diseases, and have published >1200 papers in SCI journals since 2014. Only six years after its initiation, FHS has become a leading scientific research force in Macau and nearby regions. In addition, FHS faculty members obtained highest amount of competitive grant funding from Macau Government and UM among all 10 Faculties/Institutes of UM, although we are the second smallest and newest Faculty.

President (2008) for Baltimore-Washington DC Chapter, Society of Chinese Bioscientists in America.

Direct over 150 scientists to facilitate networking, discuss their research interesting, and organize annual scientific retreat.

President-Elect (2013) for Society of Chinese Bioscientists in America.

Serve as Chief of the Mammalian Genetics Section

Supervise two Staff Scientists (equivalent to Research assistant professor) and 12 scientists in the Section

Serve as Director of the mouse knockout Core Facility for NIDDK, which generates over hundred mutant mice.

2. Scientific services

2014-present: Chair of Organization Committee; Chairman for the 1st-7th Macau Symposium of Biomedical Sciences.

2020-present: Chief Scientist, MOE Frontier Science Center for Precision Oncology, University of Macau.

2006-present: Founding Editor-in-Chief of “International Journal of Biological Sciences” (<http://www.biolsci.org>), 2020 IF: 6.58.

Organizing reviewing, extensive interaction with authors/reviewers/editors, and making decisions regarding all the manuscripts received for publication in the journal.

Served many times as a representative for NIH Director of Intramural Research on various Searching Committees for tenure track/tenure-faculty or tenure track review.

Served in Mentor Committees for five tenure-track investigators

Serve as a member of NIH Equal Opportunity and Employment Committee (2008-2011)

Serve as a member of NIH Central Tenure Committee (2013-2014)

Editorial Board of “Developmental Dynamics” 2003-2014

Editorial Board of “Cancer Biology & Therapy” 2002-2016

Editorial Board of “Cancer Epidemiology” from 2009-2014

Editorial Board of “Chinese Journal of Biotechnology” since 2007

Editorial Board of “Cell & Bioscience” 2012-2020

Editorial Board of “Journal of Genomics” since 2011

Nomination Committee of the Society of Chinese Bioscientists in America twice, from 2002-2003 and 2008-2009.

Member, ORWH-FAES-NIH High School Summer Student Program (2013-2014)

3. Membership for professional societies

American Association for Cancer Research

American Society for Biochemistry and Molecular Biology

New York Academy of Science

American Society of Microbiology

Chinese Biological Investigators Society (CBIS)

Society of Chinese Bioscientists in America (SCBA)

4. Grant review

The Wellcome Trust,
Human Frontier Science Program Organization,
Erwin-Schrodinger-Fellowship (Austria),
National Science Foundation of China,
Advanced Technology Program, National Institute of Standards and Technology, United States Department of Commerce,

NIH Study Sections:

Mammalian Genetics Study Section (6/14-6/15, 2001);
Center for Scientific Review Special Emphasis Panel (2/8/02);
ZRR1 CM-9 02, Comparative Medicine (3/20/02).
CDF-2 special Emphasis Panel (3/4/03)

US Army (DOD) study section:

Mouse Genetic Biology-1 (8/5-8/7/02, 7/31-8/2/06, 8/20-8/22/2007)
Predoctoral/postdoctoral session (5/4-6/2009)
Predoctoral/postdoctoral session (TRN-MBG Panel) (8/17-19/2011)

AACR Basic Cancer Research Grants Scientific Review Committee (Since 2019)

5. Reviewers (Regular or Ad Hoc) for the over 40 Journals including

Advanced Science, Cell, Cancer Cell Molecular Cell, Genes&Development, Nature Medicine, Nature Cell Biology, Nature Genetics, Nature Protocol, Nature Reviews Cancer, Nature Structure, Nature Communications, Science Advance, Science translational medicine, Oncogene, Plos Biology, PNAS, etc.

IV. Impact, Awards, and National and International Recognition

1. Platform presentation in scientific meetings/workshops

1995-2020: About 150 platform presentations, including keynote presentations (full list can be provided upon request)

2. Invited lectures given in various Institutions

1995-2020: About 180 invited lectures (full list can be provided upon request).

3. Guest positions

- Guest Professor, University of Electronic Science and Technology of China (Since 2018)
- Guest Professor, Shengzhen University (Since 2017)
- Guest Professor, George Washington University, USA (Since 2017)
- Guest Professor, Zhong-Shan University (Since 2017)
- Guest Professor, Chongqing Medical University, China (Since 2017).
- Guest Professor, Southwest University, China (Since 2016).
- Guest Professor, Zhuhai Renming Hospital, China (Since 2016)
- Guest Professor, Chinese University of Hong Kong (Since 2014)
- Guest Professor, The Third Military Medical University, China (Since 2012).
- Guest Professor, University of Western Australia, Australin (Since 2011)

- Guest Professor, Nanchong Medical College, China (Since 2009).
- Guest Professor, Cancer Hospital, Beijing University, China (Since 2008)
- Guest Professor, Southwest Medical University, China (Since 2007).
- Guest Professor, Wuhan University, China (Since 2005).
- Guest Professor, Kyushu University, Japan (Since 2000).
- Guest Investigator, Institute of Biotechnology, Beijing (Since 1999)

4. Honors and awards

- Honorary President, Macau Association of Precision Medicine (since 2017).
- Business Awards of Macau: “Innovative Award” (This one is for FHS and I serve as a representative for the award) (2017).
- NIDDK “You Make A Difference” award (2013).
- Elected as an AAAS Fellow (The American Association for the Advancement of Sciences), 2012.
- NIDDK Director’s Award (2011):
 - 10 people including myself in my lab received this Award on 9/9/2011.
 - “In recognition of extraordinary research in understanding mechanisms of BRAC1 and its transcriptional downstream genes in cancer, cell cycle, genetic stability, aging and metabolism”.
- Grant award from NIH Center for Regenerative Medicine (NCRM) (2011).
- NIDDK “You Make A Difference” award (2005).
- NIDDK “Serving Federal Government for Ten Years” award (2005).
- Outstanding Oversea Scholar from National Science Foundation (2002, China).
- Concept grant award from Department of Defense (2002).
- NIH-Asian & Pacific Islander American Organization (APAO) Outstanding Achievement Award (2000).
- Idea grant award from Department of Defense (2000).

V. Research

Grant support since 1995 (All as PI)

1. Intramural support from NIDDK between 1995 to 2014

Obtained about 20M USD from NIDDK for studying functions of several cancer drivers, cell cycle regulators and sirtuins in cancer, metabolism and aging.

2. Grant and financial support from outside NIDDK between 1997-2014

Philip Press Family Foundation: \$150,000 from 1997-2002

US Army (to Deng)

Idea grant: \$300,000 from June, 2001-June 2004

Concept grant: \$75,000 from October, 2003-September, 2004
(To postdoctoral fellows in Deng lab)

Concept grant: \$75,000 from October, 2004-September, 2005

Postdoctoral training: \$300,000 from October, 2006-September, 2009

NIH Center for Regenerative Medicine (NCRM)

Title of grant: Targeted gene correction of human and mouse iPS cells for liver disease treatment. Funds: \$300,000 2011-2014

NIH R01 (DK099257-01): \$1.5 million from 2014-2018
Mini-Livers Derived from Human IPS Cells for Modeling Steatosis and Therapy
PI: Alejandro Soto-Gutierrez; Co-PI: Chu-Xia Deng

3. Competitive grants since arriving University of Macau in December of 2014
(About 5,700,000.00 USD)

Chair Professor funds
Deng (PI): 500,000.00 MOP/year since 2015

Macao Science and Technology Development Fund (FDCT) 065/2015-A2
Deng (PI), 2016 – 2019
Single cell research for BRCA1-related breast stem cells and breast cancer stem cells
Amount (MOP): 2,450,000.00

Macao Science and Technology Development Fund (FDCT) 094/2015-A3
Deng (PI), 2016 - 2019
Using precise medicine approaches to identify cancer drivers for personalized cancer therapy
Amount (MOP): 5,400,000.00

University of Macau Grant MYRG2016-00139-FHS
Deng (PI), 2016 - 2019
Use Sleeping Beauty system mediated insertion mutagenesis in BRCA1 breast tissue specific gene knockout mice to identify cancer-promoting network
Amount (MOP): 3,000,000.00

University of Macau Grant MYRG2016-00132-FHS
Deng (PI), 2016 - 2019
Identification of TGF- β signaling pathway mediated signaling for the inhibition of cancer metastasis
Amount (MOP): 1,200,000.00

University of Macau Grant MYRG2017-00113-FHS
Deng (PI), 2017 - 2020
Fibroblast Growth Factor Receptor 2 (FGFR2) and Its Cooperating Factors in Mammary Tumor Initiation and Progression
Amount (MOP): 1,500,000.00

University of Macau Multiple Year Grant (MYRG2019-00067-FHS)
Deng (PI), 2020 - 2022
Identification of tumor suppressors for cholangiocarcinoma in liver-specific Smad4/Pten knockout mice using Crispr-Cas9 system
Amount (MOP): 450,000.00

University of Macau Grant (MYRG2020-00076-FHS)
Deng (PI), 2022 - 2023

Study of immune microenvironment associated with cholangiocarcinoma development and PD-1/PD-L1 blockade response regulated by SMAD4/Pten/Cul3 signaling
Amount (MOP): 520,000.00

FDCT-0112/2019/A2

Deng (PI), 06/01/2020-05/01/2023

Functional study of Cul3 as a liver tumor suppressor and drug sensitivity regulator.

Amount (MOP): 2,450,000.00

FDCT-0048/2019/A1

Deng (PI), 17/09/2019-16/09/2022

Characterization and therapeutic study of triple negative breast cancer (TNBC) subtypes induced by BRCA1-FGFR2 and related signaling",

Amount (MOP): 3,000,000.00

FDCT-0011/2019/AKP

Deng (PI), 05/01/2020-04/01/2023

Biobanking and precision oncology of several high-risk tumors in Macao and surrounding areas.

Amount (MOP): 13,000,000.00

FDCT-0034/2019/AGJ

Deng (PI), 06/01/2020-05/01/2022

Precision medicine research for refractory breast cancer based on circulating tumor cells derived organoids.

Amount (MOP): 1,170,000.00

Natural Science Foundation of China (NSFC): 82030094

Deng (PI), 01/2021-12/2025

Identify cancer driver mutations in triple-negative breast cancer for development of effective therapies

Amount (RMB) : 2,997,000.00

FDCT-0092/2020/AMJ

Deng (PI), 01/2022-12/2024

Translational research on overcoming breast cancer drug resistance by inhibiting proteasome activity and enhancing protein damage

Amount (MOP): 1,400,000.00

Shenzhen Science and Technology Innovation Committee

Deng (PI), 2021/7/30 – 2023/7/31

Establish a technology to overcome the broad-spectrum resistance of cancer by enhancing the sensitivity of chemotherapeutics

Amount (RMB): 1,000,000.00

FDCT-MUST 0092/2020/AMJ

Translational research on overcoming breast cancer drug resistance by inhibiting proteasome activity and enhancing protein damage

Deng (PI), 2022/01/01 – 2024/12/31
Amount: \$1,400,000.00 MOP

4. Several other smaller competitive grants since 2014: 3,500,000.00 MOP.

VI. Bibliography

1981-present: A total of 416 publications

H-index: 121, a total citation of >52,900 times based on SCI Web of Knowledge

H-index: 137, a total citation of >68,500 times based on Google Scholar

From Undergraduate Period (1978.3-1981.12):

1). Tang, Z-S, **Chuxia Deng** and Sun, L. (1981). Chromosomal variations in barley mutants induced by 60Co irradiation. **Acta Nanchong Teachers College**.

From Master Degree Student and Postgraduate Period (1982.1-1986.8):

2). Yang, Xingqi, **Chuxia Deng**, and Hongqi Chen (1984). Studies on the lactate dehydrogenase and malate dehydrogenase isozymes in tissue of three species in genus tilapia. **Acta Genetics Sinica** 11, 132-140.

3). **Chuxia Deng**, Xingqi Yang, and Hongqi, Chen (1985). Cloning techniques in fish cells. **Acta Hydrobiological Sinica** 9, 2.

4). **Chuxia Deng**, Xingqi Yang, and Hongqi Chen (1985). Susceptibility to grass carp reovirus of grass carp kidney cells and their clones. **Acta Hydrobiological Sinica** 9, 325-335.

5). **Chuxia Deng** (1987). Inborn error and induced mutations that affect DNA repair in mammalian cells. **Progress in Science** 5, 1-10.

From Ph.D Student Period (1986.9-1992.5):

6). Mansour, L. Suzi, Kirk, R. Thomas, **Chuxia Deng**, and Mario R. Capecchi (1990). Introduction of a lacZ reporter gene into the mouse *int-2* locus by homologous recombination. **Proc. Natl. Acad. Sci. USA** 87, 7688-7692.

7). Thomas, R. Kirk, **Chuxia Deng**, and Mario R. Capecchi (1992). High-fidelity gene targeting in embryonic stem cells by using sequence replacement vectors. **Mol. and Cell. Biol.** 12, 2919-2923.

8). **Chuxia Deng**, and Mario, R. Capecchi (1992). Reexamination of gene targeting frequency as a function of the extent of homology between the targeting vector and the target locus. **Mol. and Cell. Biol.** 12, 3365-3371.

9). **Chuxia Deng**, Kirk, R. Thomas, and Mario, R. Capecchi (1993). Location of crossovers during gene targeting with insertion and replacement vectors. **Mol. and Cell. Biol.** 13, 2134-2140.

10). **Chuxia Deng** (1994). Gene targeting in murine embryonic stem cells: a new method to manipulate the mouse genome. **Progress in Natural Science** 4, 21-31.

From Postdoctoral Period (1992.7-1995.5):

11). Oettgen, C. Hans, Thomas R. Martin, Anthony Wynshaw-Boris, **Chuxia Deng**, Jeffrey M. Drazen and Philip Leder (1994). Active Anaphylaxis in IgE-deficient mice. **Nature** 370, 367-370.

12). **Chuxia Deng**, Tony Wynshaw-Boris, Michael Shen, David Ornitz, Cathie Daugherty and Philip Leder (1994). FGFR-1 is required for the early embryonic growth and axial organization. **Gene&Deve** 8, 3045-3057.

13). Elson, Ari, **Chuxia Deng**, Juanita Campos-Torres, Lawrence A. Donehower and Philip Leder (1995). The MMTV/c-myc transgene and p53 null alleles collaborate to induce T-cell lymphomas, but not mammary carcinomas in transgenic mice. **Oncogene** 11, 181-190.

14). **Chuxia Deng**, Pumin Zhang, J. Wade Harper, Stephen J. Elledge, and Philip Leder (1995). Mice lacking p21^{cip1}/waf1 undergo normal development, but are defective in G1 checkpoint control. **Cell** 82, 675-684.
(Featured as a HOT PAPER by Scientist on July 1997 due to its high citation)

15). Lane, Timothy F., **Chuxia Deng**, Ari Elson, Myung S. Lyu, Christine A. Kozak and Philip Leder (1995). Expression of murine Brca-1 is associated with terminal differentiation of epithelial tissues in mice. **Genes&Deve** 9, 2712-2722.

16). **Chuxia Deng**, Tony Wynshaw-Boris, Fen Chou, Ann Kuo and Philip Leder (1996). FGFR-3 is a negative regulator in bone growth. **Cell** 84, 911-921.

I became a tenure track investigator in NIDDK, NIH on June 25 of 1995. NIDDK has site visit (Board of Scientific Counselor review) every four years, so I organize my publications based on the cycle of every 4 years.

Since 1995

17). Mantel, Charlie.R., Luo, Zaiming., Canfield, Jeff., **Chuxia Deng**, and Broxmeyer, Hal. E. (1996). Involvement of p21^{cip-1} and p27^{kip-1} in the molecular mechanisms of steel factor-induced proliferative synergy in vitro and of p21^{cip-1} in the maintenance of stem/progenitor cells in vivo. **Blood** 88, 3710-3719.

18). Wu-Chou S. Su, Motoo Kitagawa, Ninrong Xue, Bing Xie, Silvio Garofalo, Jae Cho, **Chuxia Deng**, William A., Horton and Xin-Yuan Fu (1997). Stat1 activation by mutant fibroblast growth factor receptor 3 responsible for type II thanatophoric dysplasia. **Nature** 386, 288-292.

- 19). **Chuxia Deng (Corresponding author)**, Mark Bedford, Cuiling Li, Xiaoling Xu, Xiao Yang, Judy Dunmore & Philip Leder. (1997). Fibroblast Growth Factor Receptor-1 (FGFR-1) is Essential for Normal Neural Tube and Limb Development. **Developmental Biology** 185, 42-54.
- 20). Barlow C, Schroeder M, Lekstrom-Himes J, Kylefjord H, **Chuxia Deng**, Wynshaw-Boris A, Spiegelman BM and Xanthopoulos KG. (1997). Targeted expression of Cre recombinase to adipose tissue of transgenic mice directs adipose-specific excision of loxP-flanked gene segments. **Nucleic Acids Res** 25, 2543-2545.
- 21). W.C. Weinberg, N.E. Montano and **Chuxia Deng** (1997). Loss of p21^{cip1/waf1} does not recapitulate accelerated malignant conversion caused by p53 loss in experimental skin carcinogenesis. **Oncogene** 15, 685-690.
- 22). Tony Wynshaw-Boris, Gabriella Ryan, **Chuxia Deng**, David C. Chan, Laurie Jackson-Grusby, Denise Larson, Judy H. Dunmore, and Philip Leder. (1997). The role of a single formin isoform in the limb and renal phenotypes of limb deformity. **Molecular Medicine** 3, 372-84.
- 23). Lijam N, Paylor R, McDonald MP, Crawley JN, **Chuxia Deng**, Herrup K, Stevens KE, Maccaferri G, McBain CJ, Sussman DJ, Wynshaw-Boris A (1997). Social interaction and sensorimotor gating abnormalities in mice lacking Dvl1. **Cell** 90:895-905.
- 24). Barlow C, Brown KD, Tagle DA, **Chuxia Deng**, Ried T and Wynshaw-Boris A. (1997). Atm selectively regulates distinct p53-dependent cell-cycle checkpoint and apoptotic pathways. **Nature Genetics** 17, 453-456.
- 25). Barlow C, Liyanage M, Moens PB, **Chuxia Deng**, Ried T and Wynshaw-Boris A. (1997). Partial rescue of the prophase I defects of Atm-deficient mice by p53 and p21 null alleles. **Nature Genetics** 17, 462-466.
- 26) Yuen, D., Mittal, L., **Chuxia Deng**, and Choi, K (1998). Generation of a primitive erythroid cell line and promotion of its growth by basic fibroblast growth factor. **Blood** 91:3202-3209.
- 27). Albrecht, JH, Poon RYC, Ahonen, CL, Rieland BM, **Chuxia Deng**, and Crary GS. (1998). Involvement of p21 and p27 in the regulation of CDK activity and cell cycle. **Oncogene** 16, 2124-2150.
- 28). Xiaoling Xu, Michael Weinstein, Cuiling Li, Michael Naski, Rick I. Cohen, David M. Ornitz, Philip Leder and **Chuxia Deng** (1998). Fibroblast growth factor receptor 2 (FGFR2) mediated reciprocal regulation loop between FGF8 and FGF10 is essential for limb induction. **Development** 125, 753-765.
- 29) Xiao Yang, Cuiling Li, Xiaoling Xu and **Chuxia Deng** (1998). The tumor suppressor SMAD4/DPC4 is essential for epiblast proliferation and mesoderm induction in mice. **Proc. Natl. Acad. Sci. USA** 95, 3667-3672.

30). David C. Olson, **Chuxia Deng** and Douglas Hanahan (1998). Functional Evaluation of the role of FGFR4 in neoplastic conversion. **Molecular Cancer Research** 9, 557-64.

31). Shanxiang Shen, Zoë Weaver, Xiaoling Xu, Cuiling Li, Michael Weinstein, Xin-Yuan Guan, Thomas Ried and **Chuxia Deng** (1998). A targeted disruption of murine *Brcal* gene (*Brcal¹¹*) causes γ -radiation hypersensitivity and genetic instability. **Oncogene** 17, 3115-24.

32) Michael Weinstein, Xiao Yang, Cuiling Li, Xiaoling Xu and **Chuxia Deng** (1998). Failure of egg cylinder elongation and mesoderm induction in mouse embryos lacking the tumor suppressor Smad2. **PNAS** 95, 9378-9383.

33) Michael Weinstein, Xiaoling Xu, Kyoji Ohyama and **Chuxia Deng** (1998). FGFR-3 and FGFR-4 Function Cooperatively to Direct Secondary Septation in the Murine Lung. **Development** 125, 3615-3623.

Since 1999

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Patent: AU5028500, Publication date: 2001-12-03

Inventors: Anita B Robert, GS. Ashcorft, A Russo, James B. Mitchell, and **Chu-Xia Deng**

Title: Inhibition of smad3 to prevent fibrosis and improve wound healing

<http://v3.espacenet.com/textdoc?DB=EPODOC&I=AU5028500&F=0>

Patent: 62645816, USA

Drug screening biochip assay for human primary cancers

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Assessment of chimeric antigen receptor T (CAR-T) cell cytotoxicity using droplet microfluidics

Patent: 63112168, USA; and 202011126326, China

Enhanced protein damage by proteasome inhibition (carfilzomib) to overcome broad drug resistance for cancer therapy.