

# SONG (JASON) CHEN

songche@umich.edu | (+1) 301-642-3368 | 4852 Washtenaw Ave Apt B11, Ann Arbor, MI 48108

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## PROFILE SUMMARY

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Vigorous and versatile professional scientist with nearly 9 years of experience in biological research and extensive training in pharmacology and physics. Highly skilled in cell-based assays, biochemical assays, molecular biology, and data analysis. Exceptional interpersonal and communication skills demonstrated by leading or working in interdisciplinary teams. Key areas of expertise:

Cancer biology | Neutrophil immunology | Cell migration | Intracellular signaling during chemotaxis | Image analysis

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## EDUCATION

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2017-Present	<b>University of Michigan</b> Ph.D. in Pharmacology, GPA: 3.92/4.00, Anticipated August 2020	Ann Arbor, MI
2014-2017	<b>University of Maryland</b> Ph.D. in Biophysics Program, GPA: 3.95/4.00, Transferred to University of Michigan	College Park, MD
2011-2014	<b>Fudan University</b> M.S. in Condensed Matter Physics (focus on biophysics), GPA: 3.15/4.00	Shanghai, China
2007-2011	<b>East China University of Science and Technology (ECUST)</b> B.E. in Applied Physics, GPA: 3.34/4.00	Shanghai, China

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## WORK EXPERIENCE

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2017-Present	<b>Graduate Researcher</b> , University of Michigan <ul style="list-style-type: none"><li>led research project for understanding structural role of leukotriene B<sub>4</sub> synthesizing enzymes in collaboration with chemists and structural biologists</li><li>Evaluated literature, designed experiments, and managed research budget and progress</li><li>Wrote and edited manuscripts for one first-author paper and 4 co-author papers</li><li>Wrote grant and fellowship proposals for \$10K research funding and one-year fellowship support</li><li>Maintained 4 microscopes and provided training and technical support for users</li><li>Mentored master student for thesis research and undergraduate for summer research</li><li>Designed quizzes, led discussions, and graded exams for 85 PharmD students as teaching assistant</li></ul>	Ann Arbor, MI
2014-2017	<b>Pre-doctoral Fellow</b> , National Cancer Institute/University of Maryland <ul style="list-style-type: none"><li>Initiated project for elucidating mechanisms behind contact guidance during cancer metastasis and led interdisciplinary team of graduate students, resulting in high impact publication</li><li>Developed novel image analysis and quantification programs for collaborators</li><li>Wrote NCI fellowship proposals and secured fellowship support for two years</li><li>Presented findings at lab meetings, department seminars, and national and international conferences</li><li>Lectured courses, demonstrated experiments, and graded papers for 110+ undergraduate students</li></ul>	Bethesda/College Park, MD
2011-2014	<b>Master Researcher</b> , Fudan University <ul style="list-style-type: none"><li>Managed purchase of equipment and assisted advisor in building lab from scratch</li><li>Designed computer-controlling automatic stage system and increased experiment efficiency by 8 times (system was patented in China from 2013 to 2016)</li></ul>	Shanghai, China

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## LEADERSHIP EXPERIENCE

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2019-Present	<b>Student Consultant</b> , miLEAD Consulting Group, Univ. of Michigan <ul style="list-style-type: none"><li>Applied analytic skills from research to real business problems as consultant in miLEAD which is a nonprofit organization built and run by graduate students and postdoctoral fellows at UM</li></ul>	Ann Arbor, MI
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2019-Present	<b>Department Representative</b> , BGSB, Univ. of Michigan	Ann Arbor, MI
	<ul style="list-style-type: none"> <li>• Participated in organizing football game tailgate gatherings for biomedical graduate students</li> <li>• Designed an online survey on current rotation and curriculum for 40+ Pharmacology PhD students; led discussion during student lunch, and submitted summary to graduate school</li> </ul>	
2012-2014	<b>Class President</b> , Fudan University	Shanghai, China
	<ul style="list-style-type: none"> <li>• Organized five extracurricular activities for 40+ graduate students; Shanghai Historical and Heritage tour won the 2<sup>nd</sup> award in extracurricular activity competition for graduate students</li> </ul>	

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### HONORS & AWARDS

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2018	<b>AAAS/Science Sponsored Membership</b> , University of Michigan	Ann Arbor, MI
2018	<b>First Prize in Image Competition</b> , CellulART Conference, University of Toledo	Toledo, OH
2014	<b>Dean's Fellowship</b> , University of Maryland	College Park, MD
2014	<b>Shanghai Outstanding Graduate Student</b> , Fudan University	Shanghai, China
2011-2013	<b>Excellent Student</b> , Fudan University	Shanghai, China
2011-2013	<b>First Prize Scholarship for Graduate Students</b> , Fudan University	Shanghai, China
2008-2010	<b>Second Prize Scholarship for Undergraduate Students</b> , ECUST	Shanghai, China
2008	<b>Shanghai Municipal Government Scholarship</b> , ECUST	Shanghai, China

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### PUBLICATIONS & PRESENTATIONS

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- Publications:** (4 of 8) **S. Chen**, M. J. Hourwitz, L. Campanello, J. T. Fourkas, W. Losert, and C. A. Parent, "Actin cytoskeleton and focal adhesions regulate the biased migration of breast cancer cells on nanoscale sawteeth," *ACS Nano* 2019 **13** (2), 1454-1468, DOI: 10.1021/acsnano.8b07140 (IF:13.9)
- F. Wang, **S. Chen**, H. B. Liu, C. A. Parent, and P. A. Coulombe, "Keratins 6a/6b regulate keratinocyte migration by impacting cell-cell and cell-matrix adhesion," *J. Cell Biol* 2018 217: jcb.201712130 (IF: 8.9)
- W. Wang, **S. Chen**, S. Das, W. Losert, and C. A. Parent, "Adenylyl cyclase A mRNA localized at the back of cells is actively translated in live chemotaxing *Dictyostelium*," *J Cell Sci*, 2018 131: jcs216176 (IF: 4.5)
- S. Chen**, N. Li, S. F. Hsu, J. Zhang, Pin-Yin. Lai, C. K. Chan, and W. Chen, "Intrinsic fluctuations of cell migration under different cellular densities," *Soft Matter*, 2014, 10(19), 3421-3425 (IF:3.4)

**Presentations:** 9 oral and 9 poster presentations in department seminars, national and international conferences

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### SKILLS & INTERESTS

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- Technical:** mammalian and bacterial cell culture • differentiation of HL60 cells • isolation of human primary neutrophils • culture and development of *Dictyostelium* • cell migration assays • Retro- and Lentivirus production • cell transfection • immunostaining • ELISA • flow cytometry • PCR • gene cloning • plasmid preparation • Western Blotting • antibody purification and labeling • protein production and purification • endogenous lipid extraction • exosome isolation • light and confocal microscopy • liposome reconstitution • negative staining and cryo grids preparation • scanning electron microscopy • transmission electron microscopy
- Computing:** MATLAB and IDL programming, Mathematica, GraphPad Prism, OriginLab
- Interests:** Cooking and road trip enthusiast, amateur photographer, hiking and biking, outdoor adventurer
- Languages:** Chinese (native), English