

Kelvin Chen

CONTACT INFORMATION	Medical Research Bldg 4 409 Lane Rd Charlottesville, VA 22903	Phone: (xxx) xxx-xxxx Email: ddw4hp@virginia.edu Homepage: https://k9chen.github.io
RESEARCH INTERESTS	Translational and clinical neuroscience, neuroimmunology, neuropharmacology, neurosurgery, vascular biology, bioinformatics, medical imaging, machine learning	
EDUCATION	University of Virginia , Charlottesville, VA B.A., Neuroscience; Minor, Bioethics • GPA: – • Advisor(s): Jianjie Ma, Ph.D. ; Ling Qi, Ph.D. • Thesis: –	Aug 2022 – May 2026
	Virginia Peninsula Community College , Hampton, VA Dual Enrollment, Biological Science & Mathematics • GPA: 4.00/4.00	Sept 2020 – Jun 2022
	Woodside High School , Newport News, VA Advanced Studies Diploma • GPA: 4.61/4.00, Rank: 1/381	Sept 2018 – Jun 2022
RESEARCH EXPERIENCE	UVA School of Medicine , Charlottesville, VA <i>Undergraduate Researcher, Dept. of Surgery</i> Advisor: Jianjie Ma, Ph.D. • Treatment of cerebral ischemia with CHO cell-derived rhMG53.	Dec 2024 – Present
	<i>Undergraduate Researcher, Dept. of Neurosurgery</i> Advisor: Petr Tvrdik, Ph.D. • Cre/Dre-dependent spatiotemporal mapping of myeloid cells.	Jan 2024 – Present
	<i>Undergraduate Researcher, Dept. of Neuroscience</i> Advisor: Lulu Jiang, M.D., Ph.D. • Proximity labeling of translocated RNA with TurboID in iPSCs.	Aug 2023 – Jan 2024
	<i>Undergraduate Researcher, Dept. of Pharmacology</i> Advisor: Julius Zhu, Ph.D. • Image analysis with genetically encoded fluorescent sensors.	Sep 2022 – May 2023
	Barrow Neurological Institute , Phoenix, AZ <i>Research Intern, Dept. of Translational Neuroscience</i> Advisor: Richard Dortch, Ph.D. • Numerical simulation of multi-compartmental dMRI models.	May 2024 – Present
	<i>Research Intern, Dept. of Translational Neuroscience</i> Advisor: Richard Dortch, Ph.D. • Automatic segmentation of peripheral nerve histology images.	May 2023 – Aug 2023
	Hampton University , Hampton, VA <i>Research Intern, Dept. of Chemistry & Biochemistry</i> Advisor: Peter Njoki, Ph.D. • Viral kinetic ODE-based modeling of antigen-conjugated NPs.	Sept 2021 – May 2022

PRESENTATIONS	[P.1] Ketsiri, T., Chen, K. , Xu, J., Dortch, R. D. <i>Numerical Validation of Multi-Compartment Diffusion Biomarkers of Peripheral Nerve Trauma</i> . 33rd Annual Meeting & Exhibition of the International Society for Magnetic Resonance in Medicine, Honolulu, HI, May 2025. [Abstract]		
	[P.2] Chen, K. , Ketsiri, T., Dortch, R. D. <i>Spherical Mean Diffusion-Weighted MRI Reveals Peripheral Axonal Pathology Following Trauma</i> . BNI Undergraduate Research Symposium, Phoenix, AZ, Aug 2024. [Poster]		
	[P.3] Ketsiri, T., Chen, K. , Xu, J., Dortch, R. D. <i>Validation of Multi-Compartmental Diffusion MRI Models for Peripheral Nerve Trauma</i> . Gordon Research Conference on In Vivo Magnetic Resonance, Andover, NH, Jul 2024.		
	[P.4] Chen, K. , Sadrabadi, M. S., Dortch, R. D. <i>Geometry-Informed Multi-Compartmental Diffusion MRI Modeling of Injured Peripheral Nerves</i> . BNI Undergraduate Research Symposium, Phoenix, AZ, Aug 2023. [Poster]		
TEACHING EXPERIENCE	University of Virginia , Charlottesville, VA		
	<i>Teaching Assistant, Dept. of Chemistry</i>		
	• CHEM 2311 Organic Chemistry I Laboratory (Non-Chemistry Majors)		Fa 2025
	Instructor: Jason Chruma, Ph.D.		
	• CHEM 1810 Principles of Chemical Structure (Accelerated)		Fa 2025
	Instructor: Walter Harman, Ph.D.		
	• CHEM 2321 Organic Chemistry II Laboratory (Non-Chemistry Majors)		Sp 2025
	Instructor: Jason Chruma, Ph.D.		
	• CHEM 2311 Organic Chemistry I Laboratory (Non-Chemistry Majors)		Fa 2024
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	• CHEM 1811 Principles of Chemical Structure Laboratory (Accelerated)		Fa 2023
	Instructor: Sen Zhang, Ph.D.		
	<i>Teaching Assistant, Dept. of Physics</i>		
	• PHYS 1429 Introductory Physics I Workshop (Engineering Majors)		Sp 2025
	Instructor: Maksim Bychkov, Ph.D.		
	<i>Teaching Assistant, Dept. of Psychology</i>		
	• PSYC 3210 Research Methods: Psychobiology Laboratory		Sp 2024
	Instructor: Thaddeus Wiegel, Ph.D.		
AWARDS & GRANTS	• Ingrassia Family Research Award (\$2,000), UVA		Apr 2025
	• Harrison Undergraduate Research Award (\$5,000), UVA		Mar 2025
	• Echols Scholarship, UVA		Aug 2023
	• University Achievement Award Scholarship (\$80,000), UVA		Apr 2022

COMMUNITY SERVICES	UVA Office of Citizen Scholar Development , Charlottesville, VA	
	<i>Symposium Volunteer</i>	Apr 2023 – Present
	• Undergraduate Research Symposium	
	<i>Editorial Board Staff</i>	Sept 2022 – Present
	• The Oculus: The Virginia Journal of Undergraduate Research	
	UVA School of Medicine , Charlottesville, VA	
	<i>Symposium Volunteer</i>	Mar 2025
	• Advancing Innovations in Translational Research into Human Applications Symposium in Honor of Hiroshi Takeshima	
	W. M. Keck Center for Cellular Imaging , Charlottesville, VA	
	<i>Workshop Volunteer</i>	Mar 2024
	• 21st Annual FRET, FLIM, & FLIRR Microscopy Workshop	
ADDITIONAL ACTIVITIES	• Editor, Grounds: The Virginia Journal of Bioethics	Jun 2023 – Present
	• Senior Translator, The Cavalier Daily	Feb 2023 – Present
	• Investigator, University Judiciary Committee	Sept 2022 – Present
	• Senior Associate, The Blosson Together Association	Sept 2022 – Present
	• Health & Medical Services Volunteer, Madison House	Sept 2022 – May 2023
AFFILIATIONS	• American Neurological Association	Jun 2024 – Present
	• Undergraduate Research Network	Sept 2022 – Present
MEDIA MENTIONS	• Students in Jianjie Ma, PhD, Laboratory Receive Harrison Undergraduate Research Awards, <i>Medicine in Motion News</i> [Link]	
SKILLS	• Programming: Python, MATLAB, R, C/C++, HTML/CSS, JavaScript, L ^A T _E X	
	• Frameworks: PyTorch, TensorFlow, NumPy, Pandas, Scikit-learn, OpenCV	
	• Languages: English, Mandarin	
REFERENCES	Jianjie Ma, Ph.D. Professor & Director Division of Surgical Sciences Dept. of Surgery UVA School of Medicine qga8zx@virginia.edu	Richard Dortch, Ph.D. Associate Professor, Director, & Chair Neuroimaging Innovation Center Dept. of Translational Neuroscience Barrow Neurological Institute richard.dortch@barrowneuro.org
	Ammasi Periasamy, Ph.D. Professor, Director, & Founder W. M. Keck Center for Cellular Imaging Dept. of Biology & Biomed. Eng. University of Virginia ap3t@virginia.edu	Andreas Gahlmann, Ph.D. Associate Professor Center for Membrane & Cell Physiology Dept. of Chemistry UVA School of Medicine ag5vu@virginia.edu