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| Xuan Kang12631 E 17th Ave, Mail B185 Aurora, CO 80045EMAIL: Xuan.Kang@CUAnschutz.edu  |
| ACADEMIC and professional Experience

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| 7-2020 – nowAssistant professor, **University of Colorado, aurora, CO*** Evaluate patient with general neurological disorders.
* Perform electrodiagnostic studies (NCS/EMG)
* Perform skin punch biopsy for evaluation of small fiber neuropathy.
* Perform Botox injection, trigger point injection and occipital nerve block for chronic headache management
* Passed neuromuscular board exam and board certified in neuromuscular medicine
* Passed ABEM certification examination and board certified in electrodiagnostic medicine.
* Published *Electrodiagnostic Assessment of Motor Neuron Disease* in the journal Neurological Clinic with Dr. Dianna Quan
* Presented talk on Small and Autonomic Neuropathy at CO Society of Clinical Neurologist Event.
* Published Medscape challenging case: A Man With Buttocks Pain, Bladder and Bowel Incontinence 2022
* Submitted manuscript “Practical guidance for the use of Patisiran in the management of polyneuropathy in hereditary transthyretin-mediated amyloidosis” with Dr. Dianna Quan and Dr. Stacy Dixon, is currently being peer reviewed.
* Submitted Medscape challenging case: 50 years old woman with back pain and leg weakness” in 2023, currently being reviewed.

10/2016 – 7/2019Epilepsy research, **University of Wisconsin, Madison, WI*** Source localization of epileptic spikes during REM vs. NREM sleeps
* Presented poster at the American Epilepsy Society (AES) annual meeting in 2019
* Published Manuscript “Quantitative spatio-temporal characterization of epileptic spikes using high density EEG: Differences between NREM sleep and REM sleep”
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| 05/2012– 08/2015NIH-NHLBI R25 Research Education Grant, **MCW, MIlwaukee, WI*** Designed and evaluated robotic rehabilitation on stroke patient’s functional recovery using fMRI and therapy measures
* Presented at the Medical College of Wisconsin Research Day
* Finalized Manuscript “Grasp-Related Neural Changes after ADL Task-Oriented Stroke Therapy With and Without a Robot; An fMRI study”
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| 07/2009 – 06/2010Research Engineer, **Rehabilitation Institute of Chicago, Chicago, IL*** Designed and evaluated effect of stretching on hand rehabilitation by design and apply robotic gloves on stroke survivors
* Presented poster at the undergraduate research symposium hosted by Northwestern University
* Helped finalized manuscript “Transient impact of prolonged versus repetitive stretching on hand motor control in chronic stroke”, as well as 2 conference proceedings at IEEE
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| 09/2006 – 09/2008NIH summer program in Neuroscience and Neuroengineering, **University of Chicago, Chicago, IL*** Tested and explored application of a prospective analytical engine in real time seizure detection
* Presented poster at the undergraduate research symposium hosted by Northwestern University
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Education

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| 07/2019-6/2020Neuromuscular Fellow, University of Colorado, Denver, CO* Weekly outpatient and inpatient EMG, skin punch biopsy, muscle biopsy, muscle biopsy reading, evaluation and treatment of patients with neuromuscular disorder
* Served on the expert panel during neuromuscular symposium in 10/2019
* QI project: standardize safety measure for immunosuppressant use in neuromuscular disorder
* Poster presentation at Carrel Krusen Neuromuscular Symposium at Dallas, TX in 2/2020 and at 10th Annual Neurology Retreat at University of Colorado in 6/2020
* Oral Powerpoint presentation at Haberfeld Professorship in Denver, CO in 1/2020.
* Served as the blinded rater for Momenta Myasthenia Trial
* Passed neurology board exam and is board certified since 12/2019
* #1 in EDX SAE in the nation.
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| 07/2016-06/2019Neurology Residency, University of Wisconsin, Madison, WI* Served as chief resident in PGY-4 year
* Created resident NCS/EMG manual during PGY-4 year
* Published case report and epilepsy research as described below
* Completed QI project by evaluating folate application in female epilepsy patient within child bearing age
* Led RITE review in PGY-4 years and consistently scored 92 and 93 percentile on RITE exam across the nation
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| 07/2015-06/2016Internal Medicine Internship, Medical College of Wisconsin (MCW), MIlwaukee, WI* Preliminary year for neurology residency training
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| 08/2010-05/2015Medical School, MCW, MIlwaukee, WI* Participated in research and community services as described below
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| 08/2005-05/2009B.S., Illinois Institue of Technology, Chicago, IL* Completed Bachelor of Science in Biomedical Engineering combined with premedical study
* Camras Scholars Program for 4 years
* Graduated with Magna Cum Laude with overall GPA of 3.8
* Participated in research and community services as described below
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# HONORS, Special recognitions and awards:

* Department of Neurology Medical Student teaching award (7/2017-6/2018), University of Wisconsin Hospital and Clinic
* Wisconsin Neurological Society Francis M. Forster Award, 10/2018
* BEST reward at University of Wisconsin for the Fastest tPA Door to Needle Time, 2019
* 1st place in Missouri-Illinois Regional Idea to Product (I2P) Competition, 2009.
	+ Developed prototype of AutoCount, an automated detection system utilizing RF ID to prevent retained surgical instruments post-op

# Membership in professional organizations:

* American Academy of Neurology, member (2016-2019)
* American Association of Neuromuscular & Electro-diagnostic Medicine, member (2019-now)

# Major Committee and Service responsibilities:

* University of Wisconsin Neurology Residency:
	+ Chief resident
	+ Program Evaluation Committee Member for the neurology residency program
* Medical College of Wisconsin:
	+ CPR instructors for medical student (4/2012-9/2012)
	+ M1 liaison for Alternative Medicine and Ophthalmology Student Group (2011-2012)
	+ Community Health Fair Chair for Asian Pacific American Medical Students Association(APAMSA) (2012-2013)
* Illinois Institute of Technology:
	+ Host Director and ISB member for the Chicago Area Undergraduate Research Symposium (2007-2009)
	+ Architecture tour guide for Mies Van der Rohe Society at IIT (2008-2009)
	+ Social chair for Chinese Student Association (2007-2009)
	+ Director of Health Services in the IIT chapter of American Red Cross (2008-2009)

# LICENSURE AND BOARD CERTIFICATION:

* Colorado Medical License, 2/7/19-4/30/21
* Wisconsin Medical License, 9/18/17-10/31/19

# Teaching record and presentations

* Grand round presentation “autoimmune mediated narcolepsy and small fiber neuropathy” at University of Colorado Medical School on 1/23/2023 with Dr. Ang Li
* Resident lecture presentation: acute myopathies & NMJ Disorders Lecture: Neurologic Emergencies Block, 4/2022, 3/2023.
* Journal club presentation “Small and Autonomic Neuropathy” at CO Society of Clinical Neurologist event 1/27/2022 & 3/22/2023
* Grand round presentation “Establishing practice Guidelines for the Use of Corticosteroids and Oral immunosuppressants in Neurological Patients” at University of Colorado Medical School on 5/6/2020.
* EMG lecture for residents 10/2019 and 12/2019
* Neuromuscular introduction lecture for graduate student in 9/2019.
* Neuromuscular fellow education session, weekly between 4/4/2020-6/16/2020.
* Medical student bedside teaching
	+ Half an hour every 2 weeks during PGY-2 year
	+ Different topics, including epilepsy, stroke, neuromuscular medicine, movement disorder
* Morning case conferences:
	+ 14 case presentations over 3 years
	+ 3 sessions of RITE review in PGY4 year for the residents
* Radiology case conference
	+ 3 oral case presentation on neuroradiology conferences
* Grand round to the neurology department at University of Wisconsin
	+ Genetic therapy of neuromuscular disease (2018)
	+ Neuro-prosthetics (2019)
* Journal club for residents:
	+ Parkinson disease (2017)
	+ Utility of ultrasound on treatment of peripheral nerve disorder (2018)

# Bibliography

*Manuscript:*

1. **Kang, X.** Neurology Case Challenge: A Man With Buttocks Pain, Bladder and Bowel Incontinence 2022. <https://reference.medscape.com/viewarticle/976837>
2. **Kang X,** Quan D. Electrodiagnostic Assessment of Motor Neuron Disease. Neurol Clin. 2021 Nov;39(4):1071-1081.
3. **Kang, X.;** Boly, M.; Findlay, G.; Jones, B.; Gjini, K.; Maganti, R.; Struck, A.; “Quantitative spatio-temporal characterization of epileptic spikes using high density EEG: Differences between NREM sleep and REM sleep”. Sci Rep. 2020 Feb 3;10(1):1673.
4. Ang, L; **Kang, X**; Frederick Edelman MD; Andrew J Waclawik MD; “Stormorken Syndrome: a rare cause of myopathy with tubular aggregates and dystrophic features; Journal of Child Neurology, Feb 2019; 34 (6): 321-24
5. Triandafilou, KM.; Ochoa, J.; **Kang, X.,** Fischer, H.C.; Stoykov, M.E.; Kamper, D.; "Transient impact of prolonged versus repetitive stretching on hand motor control in chronic stroke", Topic of stroke Rehabilitation, 2011 Jul-Aug. 18 (4): 316-24
6. Jones, C.L.; Wang, F.; Osswald, C.; **Kang, X**.; Sarkar, N.; Kamper, D.G.; “Control and kinematic performance analysis of an Actuated Finger Exoskeleton for hand rehabilitation following stroke”, Biomedical Robotics and Biomechatronics (BioRob), 2010 3rd IEEE RAS and EMBS International Conference on  Sept. 2010: 282-287
7. Wang, F.; Shastri, M.; Jones,C.L.; Gupta, V.; Osswald, C.; **Kang, X.;** Kamper, D.; Sarkar, N.; "Design and Control of an Actuated Thumb Exoskeleton for Hand Rehabilitation Following Stroke" , 2011 IEEE International Conference on Robotics and Automation, May 9-13, 2011

*Abstract:*

1. **Kang, X.;** Fridman, V.; Dixon, SE.; “Two Interesting Cases of Fiber Type Disproportion”, poster presentation at Carrel Krusen Neuromuscular Symposium in 2/2020 at Dallas, TX.
2. **Kang, X.;** Boly, M.; Findlay, G.; Jones, B.; Gjini, K.; Maganti, R.; Struck, A.; “Quantitative spatio-temporal characterization of epileptic spikes using high density EEG: Differences between NREM sleep and REM sleep”.
	1. Poster presentation at American Epilepsy Society (AES) annual meeting, 2019
	2. Oral presentation at University of Wisconsin Neurology Department Research Day, 2018
3. Johnson, M.; **Kang, X.**; Tchkenov,G.; Strachota,E.;Zhao,S.;Tarima,S.;Deyoe,E.; “Grasp-Related Neural Changes after ADL Task-Oriented Stroke Therapy With and Without a Robot; An fMRI study”, Poster presentation at MCW research day, 2013