Purple Potato

Address: Panjiayuan South Lane 17th, Chaoyang District, Beijing, China;
Email: 1510122906@pku.edu.cn

EDUCATION

Peking Union Medical College   **China**
Master of Medicine   *September 2020- Expected June 2023*
GPA: 90/100
Relevant Courses: Genomics (95/100); Oncology (93/100); Cancer Epidemiology and Clinical Research Methods (85/100); Applied Bioinformatics (87/100)

Peking University   **China**
Bachelor of Medicine   *September 2015 - July 2020*
GPA: 3.8/4.0
Relevant Courses: Bio-Statistics (90/100); Epidemiology (90/100); Evidence-based Clinical Practice (94/100); Medical Genetics (96/100); Integrative Innovation Experiment (96/100)

PUBLICATIONS

Peer-Reviewed Journal Papers (按照重要性排序或时间倒序)

- **Purple.** et al. (2015). Trichomonas gallinae Persistence in Four Water Treatments. *J Wildl Dis.* 2015 Jul;51(3):739-42.
- **Purple.** et al. (2020). Sleep-related memory consolidation in the psychosis spectrum phenotype. *Neurobiol Learn Mem.* 2020 Oct;174:107273.
- **Purple.** et al. (2017). Auditory conditioned stimulus presentation during NREM sleep impairs fear memory in mice. *Sci Rep.* 2017 Apr 12; 7:46247.
- **Purple.** et al. (2019). Artificially decreased dissolved oxygen increases the persistence of Trichomonas gallinae in water. *Int J Parasitol Parasites Wildl.* 2019 Apr 7; 9:100-103.
- **Purple.** et al. (2015). Persistence of Two Isolates of Trichomonas gallinae in Simulated Bird Baths with and without Organic Material. *Avian Dis.* 2015 Dec;59(4):472-4.
- **Purple.** et al. (2023). Phenotypic divergence in sleep and circadian cycles linked by affective state and environmental risk related to psychosis. *Sleep.* 2023 Mar 9;46(3): zsac311.
- **Purple.** et al. (2002). Fibronectin fragments upregulate insulin-like growth factor binding proteins in chondrocytes. *Osteoarthritis Cartilage.* 2002 Sep;10(9):734-46.
- **Purple.** et al. (1965). Interaction of excitation and inhibition in the eccentric cell in the eye of Limulus. *Cold Spring Harb Symp Quant Biol.* 1965; 30:529-37.
- N Fukui, **Purple.** et al. (2001). Cell biology of osteoarthritis: the chondrocytes response to injury. *Curr Rheumatol Rep.* 2001 Dec;3(6):496-505.
- Flavie Kersanté, **Purple.** et al. (2023). The $GABA_A$ receptor modulator zolpidem augments hippocampal-prefrontal coupling during non-REM sleep. *Neuropsychopharmacology.* 2023 Mar;48(4):594-604.
- Maria C Spriggs, **Purple.** et al. (2020). Detection of Trichomonas gallinae in Wild Birds Admitted to a Rehabilitation Center, Florida, USA. *J Wildl Dis.* 2020 Jul;56(3):733-735.
- Jennifer C Holt, **Purple.** et al. (2015). Use of FTA technology for detection of Trichomonas gallinae. *Vet Parasitol. 2015 Sep 15;212(3-4):396-9.*

Conference Papers

- **Purple.** et al. (2023). Purple potatoes are the loveliest creatures in the world. *Journal of Clinical Oncology 40*, e12-e12. (American Society of Clinical Oncology 2022)
-

Under Review Papers (First Author Only)

- **Purple.** et al. (2023). Differences in treatment strategies towards purple potatoes among Chinese, Chinese American, and non-Chinese American patients. *Cookers.*

RESEARCH PROJECTS

Project 1

Construction and validation of an assessment model of pathological complete response after neoadjuvant treatment (NAT) on breast cancer patients with artificial intelligence (AI)

September 2021 - present

This project is to construct and validate a model for determining pathological complete response after NAT in breast cancer based on MRI radiomics of breast cancer patients using artificial intelligence technology. By combining experts from breast medicine, surgery, pathology and imaging departments in several hospitals, we successfully established a model to solve the problem of surgical decision making for post-NAT patients.

Responsibility： project design, data collection, model construction, model validation

Skill Mastered： machine learning construction, R programing, ITK-SNAP, MRI image processing, communication and collaboration with researchers

Project 2

Construction of a cancer prognostic model based on somatic copy number alteration (CNA)

January 2022 - present

This project is to construct prognostic models for the recurrence of gastrointestinal stromal tumors, nonmetastatic colon cancer and breast cancer based on CNA. Multiple mathematical analytic methods, including Cox repression, t-SNE, k-means clustering, random forest-partitioning around medoid (PAM) clustering, were applied and several effective models were established to guide clinical treatment. These studies can be combined with liquid biopsy to establish an ctDNA-based prognostic model of tumor in the future.

Responsibility： model construction

Skill mastered： machine learning, R programming, exome sequencing, paper writing

EXTRA-CURRICULAR ACTIVITIES

- "Premier Cup" Medical Knowledge Competition, Peking University   *December 2017*
- "Medical Alliance Cup" Medical Knowledge Competition for Beijing's College Students   *April 2017*
- *Volunteer*, "Jinyu Home for the Elderly" activity, care home   *September 2016*
- *Medical helper*, ward in Peking University Sixth Hospital   *2015 - 2016*
- *Assistant*, Youth League committee of School of Basic Medical Sciences, Peking University   *July 2017*
- *Participator*, social activity with the theme of "Love, Responsibility and Growth"   *July 2017*
- *Volunteer*, "Medicine Chest" health education program, Ganzhou   *July 2017*

HONORS

- Member of American Society of Clinical Oncology (ID: 202239382)
- Excellent Graduate of Peking University, 2020
- Special Scholarship (twice), Peking University, 2016, 2017
- Merit Student (twice), Peking University, 2015, 2016
- Kwang Hua Scholarship, Peking University, 2015
- The Third Scholarship, Peking Union Medical College, 2021
- The second prize, competition of knowledge of winter Olympics, Chinese Academy of Medical Sciences, 2022
- The first prize, Biology Competition for Beijing's College Students (2nd), 2016
- Champion, China Junior Table Tennis Championships, 2008

SKILLS AND INTERESTS

Software: R; Perl; GraphPad Prism; Python
Statistics: machine learning (LASSO, t-SNE, etc); meta-analysis; immuno-infiltration analysis (CIBERSORT; ssGSEA)