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School of Mathematical and Statistical Sciences
Arizona State University
Tempe, AZ 85287; USA
April 17, 2024

Yang Kuang, Professor of Mathematics

EDUCATION:

- Aug., 1985–July, 1988, **University of Alberta**, Canada, **Ph.D**.
- Nov., 1984–Aug., 1985, Mathematical Institute, Wolfson College, **University of Oxford**, U.K. (M.Phil. program, no degree)
- Aug., 1983–July, 1984, Applied Mathematical Institute of **Academic Sinica**, Beijing, China.
- Aug., 1980–Aug., 1983; July, 1984–Nov., 1984, **University of Science and Technology of China**, **B.Sc**.

PROFESSIONAL EXPERIENCE:

- Arizona State University, July, 1997–Present, **Full Professor**.
- Arizona State University, June, 2002–May, 2005, **Associate Chair, director of graduate studies**.
- National Tsing Hua University, Taiwan, May, 1999–June, 1999, **Visiting Professor.**
- University of Shizuoka, Japan, July, 1995–Aug., 1995, **Visiting Professor**
- University of Urbino, Italy, June, 1995–July, 1995, **Visiting Professor**
- University of Arizona, May, 1994–Dec., 1994, **Visiting Professor**
- Arizona State University, July, 1992–June, 1997, **Associate Professor**
- Arizona State University, Aug., 1988–June, 1992, Assistant Professor
- University of Alberta, 1986–1988, Izaak Walton Killam Scholar
- University of Alberta, 1985–1986, Teaching Assistant
- University of Oxford, 1984–1985, Graduate Student and Research Assistant.

RESEARCH IMPACT:

1. I have a total Scopus citation of 9497, an h-index of 50
2. I have a total citation of 21705, an h-index of 61 and an i10-index of 158 (https://scholar.google.com/citations?user=-TfeDVcAAAAJ&hl=en&oi=ao).
3. According to **MathSciNet, Yang Kuang is cited 4917 times by 3180 mathematical publications and 3545 authors** in the MR Citation Database.
4. In Stanford University Identifies Top 2% Scientists, 1996 to 2019. (https://data.mendeley.com/datasets/btchxktzyw/2).

5. In Thomson Reuters' Highly Cited Researchers in mathematics list, 2001-2010 (http://ip-science.thomsonreuters.com/hcr/mathematics.xlsx).

6. Cited 6147 times: Y. Kuang, 1993. Delay differential equations with applications in population dynamics. Mathematics in Science and Engineering, 191. Academic Press, Inc., Boston. xii+398 pp. ISBN: 0-12-427610-5.

PATENTS:

1. U.S. Patent No. 11,786,176. Patient-specific parameter estimates of glioblastoma multiforme growth dynamics. Granted (issued) on 10/17/2023.

2. U.S. Provisional Patent Application No. 62859993, filed June 11, 2019. Patient-specific parameter estimates of glioblastoma multiforme growth dynamics.

3. U.S. Non-provisional Patent Application No. 16899155, filed June 11, 2020. Patient-specific parameter estimates of glioblastoma multiforme growth dynamics.

4. U.S. Provisional Patent Application No. 11157061, filed July 1, 2020. Methods and systems for generating complex spatial patterns.

EDITORIAL BOARDS:

1. Mathematical Biosciences and Engineering, **editor-in-chief** (funding editor), 2003-present. This highly ranked and respected open access journal publishes almost 1000 papers a year.

2. SIAM J. Applied Mathematics, **associated editor**, January 1, 2020-present.

3. Mathematical Biosciences. Elsevier. Associate Editor. 2017-2023.

4. Mathematics and Computers in Simulation. Elsevier. Associate Editor. 2017-present.

5. Scientific Reports by Nature Publishing Group, **associated editor**, 2015-present. Open access.

6. Heliyon by Elsevier, **associated editor**, 2016-present. Open access.

7. Cogent Mathematics by Taylor & Francis Group, **associated editor**, 2015-2018. Open access.

8. AIMS Mathematics by AIMS, **associated editor**, 2015-present. Open access.

9. Biology Direct, **associate editor**, 2008-present. Open access.

10. Applied Sciences by MDPI - Open Access Publishing, **associated editor**, 2015-present. Open access.

11. Discrete and Continuous Dynamical Systems (Series B), **associate editor**, 2000-present.

12. Journal of Biological Systems, **associate editor**, 2004-present.

13. International Journal of Biomathematics, **associated editor**, 2007-present.

14. Bulletin of Mathematical Biology, **advisory board member**, 2014-2015.

15. Journal Of Computational And Applied Mathematics, advisory editor, 2008-2011.

16. Bulletin of Biomathematics (in Chinese), **associate editor**, 1995-1997.

17. Proceedings of International Conference on Dynamical Systems and Differential Equations, (Springfield, 1996), **guest editor**.

18. Proceedings of International Conference on Mathematical Biology, (Guilin, 2002, Wuyi, 2008), **guest editor**.

19. Journal of Biomathematics(in Chinese), **associated editor**, 1997-2007.

CURRENT RESEARCH GRANTS:

1. September 1, 2023-August 31, 2026, **PI**. Total $0.5m. NSF DMS-2325146. eMB: Mathematical Classification of Complexity in Population Dynamics.

2. November 15, 2019-October 31, 2024, **ASU PI**. Total $2.54m, ASU portion $445k. NSF DEB-1930728. Collaborative Research: RoL: The rules of life were made to be broken - Connecting physiology, evolutionary ecology, and mathematics to identify a Growth Rate Rule.

3. September 1, 2018-August 30, 2024, **PI**. $1.46m. NIH R01 GM131405-01. Predictive Modeling of Pattern Formation Driven by Synthetic Gene Networks. Funded at the requested level.

4. May 1, 2018 -April 30, 2023 **co-PI**. $0.8m. NSF-MPS: Division of Mathematical Sciences (DMS) Collaborative Research: REU Site: Applied Mathematics and Computational Modeling in the Greater Phoenix Area.

PAST RESEARCH GRANTS:

1. April 1, 2017-March 31, 2020, **co-PI**. $0.75m. Arizona Biomedical Research Commission grant. Patient-specific mathematical neuro-oncology (with Eric Kostelich as PI).

2. Sept 1, 2016 -Aug. 31, 2020, **PI**. $193,873. NSF DMS 1615879. Dynamics and Applications of Cell Quota Based Plant-Pathogen Interaction Models (single PI).

3. July 1, 2019 -Aug. 31, 2020, **co-PI**. $24,240. NSF DMS-1917512. Seventh International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems (ICMA-VII). (PI: Abba Gumel).

4. July 15, 2012-June 30, 2018, **co-PI**. $1.25m. NSF Grant DMS-1148771. MCTP: Mathematics Mentoring Partnership Between Arizona State University and the Maricopa County Community College District (with Eric Kostelich as PI).

5. Jan 15, 2015-Dec. 31, 2017, **PI**. $152,976. NSF DMS 1518529. RAPID: Data-Based Spatiotemporal Models of Ebola Epidemics and Control (with Gerardo Chowell as a co-PI).

6. Sept. 15, 2009-Sept. 14, 2013, PI: Yang Kuang. $499K. NSF Grant DMS- 0920744. Robust Theoretical Frameworks for Ecological Dynamics Subject to Stoichiometric Constraints. Funded by NSF programs in mathematical biology and environmental biology. **PI**.

7. Sept. 15, 04-Aug. 31, 12. NSF MSP 0412537. Project Pathways: A Math and Science Partnership Program for Arizona Targeted Project Track. **$12.5 million. Senior personnel**

8. May 1, 04-April 30, 12, NSF TPC 0353470. Developing a Professional Learning Community Model for Secondary Precalculus Teachers: A Model for Teacher Professional Growth. **$4.5 million. Co-PI**

9. 8/15/05 - 1/31/09. NSF 0518697. Catalyst: Center for Excellence in Adaptive Neuro-Biomechatronic Systems (CEANS). **$133,118. Co-PI**

10. Sept. 15, 04-Aug. 31, 11. UBM: Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences at ASU. DMS 0436341. **$800,000. PI**

11. July 1, 04-June 30, 10, DMS/NIGMS 0342388. Collaborative Research:Towards an Integrative Mechanistic Theory of Within-Host Disease Dynamics. **$1.6 million. PI**.

12. EMSW21-MCTP: Mentorship Through Research: A Model for an Emerging Urban American University.NSF. **$399,930**. 05/01/05-07/31/09. **Co-PI**

13. Catalyst: Center for Excellence in Adaptive Neuro-Biomechatronic Systems (CEANS) NSF, **$110,945**. 03/01/05-08/28/09. **Senior personnel**

14. 2002-2005, NSF INT-0203702. NSF-Chilean Joint Project: Some Aspects of the Qualitative Theory of Functional Differential Equations, Joint with Anatoli. Ivanov, (Penn State), Hal. Smith, **$27,306. ASU PI**

15. Sept. 1, 2000-Aug. 31, 2005, NSF Grant DMS-0077790, *Theoretical Frameworks for Ecological Dynamics Subject to Stoichiometric Constraints.* Amount: **$314,994.** NSF mathematical biology (jointly supported by population biology and ecosystems). **PI**

16. 1993-1996, NSF Grant DMS-9306239, *Global qualitative analysis of ecological models with time delays and diffusions.* $42,000. **PI**

17. 1991-1993, NSF Grant DMS-9102549, *Global qualitative analysis of ecological models with time delays and diffusions.* $24,134. **PI**

18. 1990 CLAS Summer Research Award at Arizona State University. $1,000. **PI**

19. 1989 CLAS Summer Research Award at Arizona State University. $2,000. **PI**

20. 1989 Faculty Grant-in-Aid Award by Arizona State University. $4,000. **PI**

21. 1986-89 Izaak Walton Killam Memorial Doctoral Study Research grant at University of Alberta. can$1,500. **PI**

HONORS, AWARDS, SCHOLARSHIPS AND PRIZES:

1. 2018 and 2019 Nominated for an Outstanding Graduate Mentor Award at the Graduate College of Arizona State University.

2. 2015 Nominated for an Outstanding Graduate Mentor Award at the Graduate College of Arizona State University.

3. 2015 Nominated for a College of Liberal Arts and Sciences Teaching Award at Arizona State University.

4. 2012 Thomson Reuters Highly Cited Researcher in the period of 2001-2010 in mathematics.

5. 2008 Outstanding Graduate Mentor Award finalist, by the Graduate College of Arizona State University.
6. 2007 Outstanding Graduate Mentor Award finalist, by the Graduate College of Arizona State University.
7. 2000 Mentorship Appreciation Award, by the Graduate College of Arizona State University.
8. 1990 NSF Travel Award to ICM-90, Japan. $2,000.
9. 1988 Andrew Stewart Graduate Research Prize for Doctoral Research by University of Alberta. Can.$2,500.
10. 1987 Graduate Research Travel Award by University of Alberta. can.$500.
11. 1986-89 Izaak Walton Killam Memorial Doctoral Study Scholarship at University of Alberta. Can.$38,000.
12. 1984-86 Overseas Research Student Award, by University of Oxford. £4,000.

GRADUATE STUDENT SUPERVISION:

Current Ph.D Graduate Students with Publications

- Kamrun Nahar Keya (Ph.D.)
- Samantha Brozak (US citizen, Ph.D.)

Previous Students

- **Past Ph.D students**

(26) **Duane Harris** Dissertation: Modeling Brain Cancer Progression using Reaction-Diffusion Equations with Minimal Parameters. Successfully defended on April 7, 2023. Postdoc position offered by Penn State University.

(25) **Tin Phan** Dissertation: Prostate Cancer Modeling - exploring a path from theory and practice. Successfully defended on July 8, 2021. Postdoc in Los Alamos National Lab.

(24) **Changhan He** Dissertation: Spatial Temporal Patterning and Dynamics of E. Coli Growth with Nutrient Variation. Successfully defended on June 30, 2021. Postdoc in University of California, Irvine.

(23) **Elpiniki Nikolopoulou** Dissertation: Mathematical Modeling of Novel Cancer Immunotherapies. Successfully defended on May 13, 2020. Scientist at Health Services Advisory Group, Inc. (HSAG).

(22) **Lifeng Han** Dissertation: Cancer Invasion in Time and Space. Defended on April 17, 2020. Successfully defended on April 17, 2020. Lecturer at University of Colorado at Boulder.

(21) **Lauren Dickman** Dissertation: Analysis of Tumor-Immune Dynamics in an Evolving Dendritic Cell Therapy Model. Successfully defended on April 17, 2020. Scientist at Health Services Advisory Group, Inc. (HSAG).

(20) **Javier Baez** Thesis title: Mathematical Models of Androgen Resistance in Prostate Cancer Patients under Intermittent Androgen Suppression Therapy. Successfully defended on November 7, 2017. Data Scientist at Caterpillar.

(19) **Chaoxing Li** Thesis title: Topological Analysis of Biological Pathways: Genes, MicroRNAs and Pathways Involved in Hepatocellular Carcinoma. Successfully defended on October 5, 2017. Entrepreneur in Silicon Valley.

(18) **Bruce Pell**. Thesis title: Dynamics and Implications of Data-Based Disease Models in Public Health and Agriculture. Successfully defended on August 11, 2016. Visiting Assitant Professor in St Olaf College.

(17) **Erica Rutter**. Thesis title: A Mathematical Journey of Cancer Growth. Successfully defended on July 7, 2016. Postdoc fellow at North Carolina State University.

(16) **Rebecca Everett**. Thesis title: Applications of the Droop Cell Quota Model to Data Based Cancer Growth and Treatment Models. Successfully defended on April 7, 2015. Postdoc fellow with Banks at North Carolina State University. Received many postdoc and tenure track offers, including one from National Cancer Institution. Assistant Professor at Haverford College, effective on July 1, 2018.

(15) **Aaron Packer**. Thesis title: Cell Quota Based Population Models and their Applications. Successfully defended on November 17, 2014. Funded PACKERSOFT in 2011.

(14) **Yuqin Zhao**. Thesis title: Mathematical and Statistical Insights in Evaluating State Dependent Effectiveness of HIV Prevention Interventions. Successfully defended on Nov. 13, 2014. Postdoc at University of Minnesota.

(13) **Angela Peace** Thesis title: stoichiometric producer-grazer models incorporating the effects of excess food-nutrient content on grazer dynamics. Successfully defended on May 2, 2014. Postdoctoral fellow of National Institute for Mathematical and Biological Synthesis. Since 2015, she is a tenure track assistant professor at Texas Tech University.

(12) **Hao Liu** Thesis title: Spatial spread of rabies in wildlife. Postdoctoral fellow in GeorgiaTech. Successfully defended on May 2, 2014. Currently a quantitative risk analyst in Citigroup.

(11) **Kevin Flores** (US citizen, Hispanic) Successfully defended on October 5, 2009. Title: *Multi-scale Modeling of Cancer*. Time to graduation is 5 years. He is a researcher at Mayo Clinic in Phoenix. Since 2015, he is a tenure track assistant professor at North Carolina State University.

(10) **Sarah Hews** (US citizen), Ph.D thesis defended on July 13, 2009. Title: *Models Of Hepatitis B Virus Infection: A Study on Hepatocyte Proliferation Rates*. Time to graduation is 4 years. She is an assistant professor at Swarthmore College.

(9) **Yun Kang**, Ph.D thesis defended on May 23, 2008 (co-advisor). Title: *Dynamics of discrete plant-herbivore models*. Time to graduation is 4 years. She is a tenure associate professor at ASU-East.

(8) **Craig Thalhauser**, Ph.D thesis defended on July 30, 2007. Title: *A Two-State Model of Cancer Growth: Evolutionary Implications at the Local and Global Scales*. He is a postdocoral fellow in University of California, Irvine. Time to graduation is 4 years. He is the Assoc. Director/Quantitative Clinical Pharmacology Bristol-Myers Squibb.

(7) **Hao Wang**, Ph.D thesis defended on Nov. 30, 2006. Title: *Mathematical Analysis of Trophic Interactions: From Bacteria Competition to Lemming Cycles*. He held a joint assistant professor position in the school of Mathematics and Department of Biology in Georgia Tech. Since 2015, he is a tenured associate professor at University of Alberta, Canada. Time to graduation is 3.5 years.

(6) **Clint Mason** (US citizen), Ph.D thesis defended on June. 7, 2006. Title: *Modeling glucose dynamics leading to a diabetic state with simulations performed from data on Pima indians*. He is a NIH postdoctoral fellow in NIDDK in Phoenix. Since 2014, he is an tenure track assistant professor in the Department of Pediatrics, Division of Pediatric Hematology-Oncology, at the University of Utah. Time to graduation is 3.5 years.

(5) **Roxana Lopez-Cruz**, Ph.D thesis defended on Feb. 7, 2006. Title: *Structured SI epidemic models with applications to Hiv epidemic*. Time to graduation is 4.5 years. She is a full professor and the director of the school of Mathematics of Universidad Nacional Mayor de San Marcos, Lima, Peru. Since 2014, she is elected as a member of the academic of science of Peru.

(4)**Jiaxu Li**, Ph.D thesis at ASU: *The dynamics of glucose-insulin endocrine metabolic regulatory system*, Dec, 2004. He is currently a tenured associate professor at University of Louisville. Time to graduation is 3.5 years. (excluding time in industry).

(3)**Dr Chris Miller**, Ph.D thesis at ASU: *Modeling and analysis of stoichiometric two patch consumer-resource system*, Dec, 2002. Chris is now an assistant professor of the Department of Mathematics in Glendale Community College. Time to graduation is 3 years.

(2) **Irakli Loladze**, Ph.D thesis at ASU: *The importance of being stoichiometric: Population dynamics from the perspective of chemical elements*, May, 2001. Irakli an assistant professor in the Department of Mathematics in Univ. Nebrasks at Lincoln in the Fall, 2003. Time to graduation is 3 years.

(1) **Bingtuan Li**, Ph.D thesis at ASU: *Analysis of chemostat-related models with distinct removal rates*, Aug. 1998 (Was a math. biol. postdoctor fellow at IMA (1998-1999), a research instructor at U. of Utah (1999-2001, working with Mark Lewis), now a full professor at U. of Louisville). Time to graduation is 4 years.

- Was the chair of the M.Sc or M.N.S. committee for (1) Mr. Nejib Smaoui, (M.N.S.)graduated in May, 1990; (2) Mr. Samir Hammadi, (M.N.S.)graduated in May 1994; (3) Mr. Mattew Lyles, (M.A with a thesis) Analysis of a Ratio-Dependent Predator-Prey System with Two Patches, graduated in May 1997; (4) Mr. Travis Steele, (M.A with a thesis) An Analysis of a Ratio-Dependent Predator-Prey System with Competing Prey Species, graduated in Aug. 1997.; (5) Mr. Jay Wopperer, Thesis title: The Tuberculosis Endemic, Dec., 2002. (6) Andrew Jeanings, Master in passing, Aug. 2006 (US citizen). (7) Ron Ogborne, Master in passing, Aug. 2006 (US citizen). (8) Steffen Eikenberry, July, 2008 (US citizen). (9) Mathew Wienke, Aug. 2008 (US citizen). (10) Loan Nyugen, Nov. 2008. Co-advisor. (US citizen). (11) Aaron Abromowitz (2010). (US citizen).

- Was a member of numerous M.Sc committees and a member of the following Ph.D. committees for (1) Mr. Jeffrey Kuo(1988-1990, Mech. Eng., graduated in Dec., 1990), (2) Mr. Steven Gustafson(1989-1990), (3) Mr. Tiemao Peng(1990-1991 , Electr. Eng.), (4) Ms. Lan Xu(1991), (5) Ms. Hsiu-Rong Zhu(1989-1991). (6) Mr. Yuqin Zhang(1989-1993, Electr. Eng.), (7) Mr. Edisanter Lo(1990-1993), (8) Mr. Qi Zhao (1990-1992), (9) Mr. Zhongmin Liu(1991-1994), (10) Mr. Baorong Tang(1989-1995), (11) Ms. **Zhilan Feng**(1989-1994), (12) Mr. He-Yi Wu(1993-1995), (13) Mr. Tao Zhao(1991-1995), (14) Mr. Qian An(1993-1995), (15) Eric. Stemmon(1997-1998), and many more.

SELECTED RECENT (last 16 years) INVITED TALKS:

1. February 22, 2024. INTERNATIONAL CONFERENCE ON RECENT TRENDS IN APPLIED MATHEMATICS - ICRTAM 2024. Invited Talk. Loyola College, Chennai, India. Over Zoom. Title : Models of Hormone Treatment for Prostate Cancer: Can Mathematical Models Predict the outcomes?

2. December 14, 2023. MATRIX program on delay-differential equations at University of Melbourne, Australia (Dec. 11-20, 2023). Title : Oscillatory dynamics of an intravenous glucose tolerance test model with delay interval.

3. July 11, 2023. QRLSSP Guest Lecture at ASU. Title : Rich and realistic dynamics of resource quality based population models.

4. June 16, 2023. ICERM invited talk at the Mathematical and Computational Biology workshop at Brown University (zoom). Title : Rich and realistic dynamics of resource quality based population models.

5. June 13, 2023. Southwest University, China. Invited colloquium talk (zoom). Title : Rich and realistic dynamics of resource quality based population models.

6. June 2, 2023. Special session invited talk at the 13th AIMS International Conference on Dynamical Systems, Differential Equations and Applications at Wilmington, North Carolina, USA. Title : Rich and realistic dynamics of resource quality based population models.

7. February 24, 2023. INTERNATIONAL CONFERENCE ON RECENT TRENDS IN APPLIED MATHEMATICS - ICRTAM 2023. Invited Talk. Loyola College, Chennai, India. Over Zoom. Title : Rich and realistic dynamics of resource quality based population models.

8. October 6, 2022. University of Florida Biomathematics Seminar over Zoom. Title : Rich and realistic dynamics of resource quality based population models.

9. August 16, 2022. Keynote speaker at the Workshop on Modeling Population Dynamics in Ecology, Environment and Epidemiology, Fields Institute, Toronto, Canada, August 15-19, 2022. Title : Rich and realistic dynamics of resource quality based population models.

10. December 15, 2021. Applied Mathematics seminar talk via Zoom at Central China Normal University, Wuhan, China. Title: Predictive Mathematical Models of Hormone Treatment for Prostate Cancer.

11. November 5, 2021. Applied Mathematics seminar talk via Zoom at School of Mathematics and Statistics, Wuhan University, Wuhan, China. Title: Existence and Implications of Traveling Wave Solutions in Reaction Diffusion Models of Brain Cancer Growth.

12. October 26, 2021. Colloquium talk via Zoom at GangNan Normal University (Gangzhou, Jianxi, China). Title: Dynamics and Implications of an Ovarian Cancer Treatment Model with Time Delay.

13. October 11, 2021. Colloquium (in person) at Applied and Computational Mathematics and Statistics (ACMS) University of Notre Dame. Title: Existence and Implications of Traveling Wave Solutions in Reaction Diffusion Models of Brain Cancer Growth.

14. February 20, 2021. Keynote Speaker at AMS 2021 (2021 Asia-Pacific Conference on Applied Mathematics and Statistics, Chiang Mai,Thailand (Online)). Title: Existence and Implications of Traveling Wave Solutions in Reaction Diffusion Models of Brain Cancer Growth.

15. February 19, 2021. Invited Speaker at the Florida Atlantic University-SIAM student chapter. Title: Traveling Wave Solutions in Some Reaction Diffusion Models of Brain Cancer Growth.

16. December 14, 2020. Mathematical Biology seminar talk via Zoom at Northeast Normal University, China. Title : Existence and clinical implications of traveling Wave Solutions in Some Reaction Diffusion Models of Glioblastoma Growth.

17. December 13, 2020. Mathematical Biology seminar talk via Zoom at Guangzhou University, China. Title : Existence and implications of traveling Wave Solutions in Some Reaction Diffusion Models of Glioblastoma Growth.

18. December 9, 2020. Applied Mathematics seminar talk via Zoom at Central China Normal University, Wuhan, China. Title : Rich dynamics of resource quality based population models.

19. November 23, 2020. Invited talk at the International Conference on Dynamical Systems and Applications held at Shanghai Jiao Tong University (Zoom meeting, November 23-27, 2020). Title : Traveling Wave Solutions in Some Reaction Diffusion Models of Glioblastoma Growth.

20. October 27, 2020. Applied Mathematics seminar talk via Zoom at Penn State University. Title : Traveling Wave Solutions in Some Reaction Diffusion Models of Glioblastoma Growth.

21. January 24, 2020. Mathematical biology seminar talk given by co-author Elpiniki Nikolopoulou. Title : Mathematical Modeling of an Immune Checkpoint Inhibitor and Its Synergy with an Immunostimulant.

22. Nov. 5, 2019. Invited speaker for the workshop on Mathematical physiology - Better Health Through Mathematics, the University of Montreal (Organized by Jacques Belair, Fahima Nekka and John Milton). Talk title: Oscillatory dynamics of an intravenous glucose tolerance test model with delay interval.

23. August 28, 2019. Colloquium talk at Southwest University, Chongqing, China. Title: Data Based Ovarian Cancer Growth and Treatment Model with Time Delay.

24. Aug. 22, 2019. Invited speaker for the 9th Annual meeting of Chinese Theoretical Ecology Society in August (Aug. 20-24) in Shanghai, China. Title: Rich dynamics of resource quality based population models.

25. Aug. 20, 2019. Applied Mathematics Seminar at Fudan University, Shanghai. Title: Traveling wave solutions in some reaction diffusion models of glioblastoma growth.

26. Aug. 19, 2019. Mathematical Biology Seminar at University of Shanghai for Science and Technology. Title: Oscillatory dynamics of an intravenous glucose tolerance test model with delay interval.

27. July 22, 2019. Society of Mathematical Biology mini-symposium talk, Montreal, Canada. Title: Predictive Mathematical Models of Hormone Treatment for Prostate Cancer.

28. June 7, 2019. MTBI Special Talk, Gangzhou, Jianxi, China, Gang Nan Normal University. Title: Models of Hormone Treatment for Prostate Cancer: Can Mathematical Models Predict the outcomes?

29. May 2, 2019. Special Talk for Mathematical Biology Students, Applied Mathematics Seminar Talk, Department of Mathematics, School of Science and Technology, Nazarbayev University, Nur-Sultan, Kazakhstan. Title: Rich dynamics of resource quality based population models

30. April 30, 2019. Applied Mathematics Seminar Talk, Department of Mathematics, School of Science and Technology, Nazarbayev University, Nur-Sultan, Kazakhstan. Title: Predictive Mathematical Models of Hormone Treatment for Prostate Cancer.

31. December 27, 2018. Colloquium, Gangzhou, Jianxi, China, Gang Nan Normal University. Title: Rich dynamics of resource quality based population models.

32. December 23, 2018. Lecture series 1, Guangzhou, Guangdong, China, Guangzhou University. Titles: Dynamics and implications of hepatitis B virus infection.

33. December 23, 2018. Lecture series 1, Guangzhou, Guangdong, China, Guangzhou University. Titles: Traveling wave solutions in some reaction diffusion models of glioblastoma growth.

34. December 22, 2018. Lecture series 2, Guangzhou, Guangdong, China, Guangzhou University. Titles: Droop growth rate based population models in biology and medicine,

35. December 22, 2018. Lecture series 2, Guangzhou, Guangdong, China, Guangzhou University. Titles: Models of hormone treatment for prostate cancer: Can mathematical models predict the outcomes?

36. December 21, 2018. Colloquium, Guangzhou, Guangdong, China, Zhong Shan University. Title: Dynamics of a Data Based Ovarian Cancer Growth and Treatment Model with Time Delay.

37. December 5, 2018. Public Science Talk at the NATIONAL ACADEMY OF SCIENCES(NASI) and the University of Allahabad, Allahabad, India. Title: Hormone Treatment for Prostate Cancer: Can Mathematical Models Predict the outcomes?.

38. December 3, 2018. Plenary lecture in the International Conference on Mathematical Modeling and Computations (ICMMC-2018) at SAU, New Delhi, India. Title: Rich dynamics of resource quality based population models.

39. October 4, 2018. Keynote talk at the Workshop on Delay Differential Equations: Theory, Applications and New Trends, UAEU, Al-Ain, UAE. Title: Oscillatory dynamics of an intravenous glucose tolerance test model with delay interval.

40. August 12-15, 2018. Invited lecture at PMED Opening Workshop, SAMSI, Relaigh, North Carolina. Title: Dynamics and implications of hepatitis B virus infection.

41. July 27, 2018. The Sixth G. J. Butler International Conference on Differential Equations and Population Biology, University of Alberta, Canada. Butler Lecture 3: Traveling wave solutions in some reaction diffusion models of Glioblastoma growth.

42. July 25, 2018. The Sixth G. J. Butler International Conference on Differential Equations and Population Biology, University of Alberta, Canada. Butler Lecture 2: Models of hormone treatment for prostate cancer: Can mathematical models predict the outcomes?

43. July 23, 2018. The Sixth G. J. Butler International Conference on Differential Equations and Population Biology, University of Alberta, Canada. Butler Lecture 1: Rich dynamics of resource quality based population models.

44. May 29, 2018. NCTS Workshop on Mathematical Biology at Tsinghua University, Taiwan. Title: Oscillatory dynamics of a data validated intravenous glucose tolerance test model with delay interval.

45. April 27, 2018. Applied and Computational Math Seminar at George Mason University. Seminar title: Mathematical Models of Prostate Cancer Patients Undergoing Intermittent Androgen Deprivation Therapy.

46. November 22, 2017. 1st DECOD Workshop on Delays and Constraints on Distributed Parameter System, November 22-24, 2017, Centrale Suplec, Paris, France. Title: Oscillatory dynamics of an intravenous glucose tolerance test model with delay interval.

47. October 26, 2017. Mathematical Colloquium, Texas Tech University. Title: Models of Hormone Treatment for Prostate Cancer: Can Mathematical Models Predict the outcomes?

48. October 20, 2017. The Sixth International Conference on Mathematical Modeling and Analysis of Populations in Biological Systems, October 20 - 22, 2017, University of Arizona. Title: Rich Dynamics of a Stoichiometric Food Chain Model with Two Limiting Nutrients.

49. April 1, 2017. AMS Sectional Meeting at Indiana University, Bloomington, April 1-2, 2017. Title: Dynamics of an Ovarian Cancer Growth and Treatment Model with Time Delay.

50. December 12, 2016. Colloquium at the Department of mathematics of Xian Jiaotong Liverpool University, Suzhou, China. Title: Food quality matters: rich dynamics of resource quality based population models.

51. December 9, 2016. Colloquium at the Department of mathematics of Shanghai Normal University, Shanghai, China. Title: Rich dynamics of resource quality based population models.

52. December 7, 2016. Colloquium at the Department of mathematics of East China Normal University, Shanghai, China. Title: Can mathematical models predict prostate cancer androgen suppression therapy treatment results?

53. December 6, 2016. Colloquium at the Department of mathematics of Tongji University, Shanghai, China. Title: Dynamics of a Data Based Ovarian Cancer Growth and Treatment Model with Time Delay.

54. Five invited workshop lectures in December (Shanghai Jiao Tong University, Dec. 5-9, Workshop on Mathematical Models of Tumor and Disease), 2016.

55. July 2, 2016. Invited talk in Mathematical Models of Cell Motility and Cancer Progression in Microenvironment: Design, Experiments, Mathematical Framework, and Hypothesis Test, at 11 th AIMS Conference, Orlando. Title: Androgen Resistance Prediction in Prostate Cancer Patients Under Androgen Suppression Therapy.

56. July 2, 2016. Invited talk in Recent Advances in Dynamical Systems with Applications to Ecology and Epidemiology, at 11 th AIMS Conference, Orlando. Title: Stability and Bifurcation in a Stoichiometric Producer-grazer Model with Knife Edge.

57. April 12, 2016. Biomath seminar at the Department of mathematics of North Carolina State University, USA. Title: Traveling waves of data-validated density-dependent diffusion models of glioblastoma growth.

58. December 21, 2015. Colloquium at the Department of mathematics of Shanghai Normal University, Shanghai, China. Title: Dynamics and implications of a data-validated model of hepatitis B virus infection.

59. December 18-20, 2015. Workshop on Current Topics in Mathematical Biology, Shanghai Normal University, Shanghai, China. Invited talk on Dec. 18. Title: Dynamics of clinical data validated prostate cancer treatment models.

60. December 16, 2015. Colloquium at the Department of mathematics of Shanghai Jiao Tong University, Shanghai, China. Invited talk. Title: Dynamics of a Data Based Ovarian Cancer Growth and Treatment Model with Time Delay.

61. June 22-July 4, 2015. Delivered 8 invited lectures in the Harbin Institute of Technology, in China.

62. July 4, 2015. Colloquium talk titled Mathematical Models of Melanoma Growth and Surgical Treatment, at University of Science and Technology of Beijing, China.

63. July 2, 2015. Colloquium talk titled Models with explicit resource quality dynamics and their implications, at Beihang University, Beijing, China.

64. June 29, 2015. Colloquium talk titled Data Based Spatial Ebola Epidemics Forecasting Models, at Heilongjiang University, China.

65. June 26, 2015. Colloquium talk titled: Mathematical Models of Melanoma Growth and Surgical Treatment, at Northeast Normal University, Changchun, Jilin, China.

66. June 21, 2015. Colloquium talk titled: How much and when to cut? A Mathematical Models of Melanoma, at Renmin University, Beijing, China.

67. June 8, 2015. International conference on Micro and Macro Systems in Life Sciences, Bedlewo, Poland. Invited talk. Title: Can Dynamical models of prostate cancer treatment.

68. May 15, 2015. University of California, San Francisco. Invited talk. Title: Logistic Equation Based Spatial Ebola Epidemics Forecasting Models: Importance of Behavior Changes.

69. April 24, 2015. Department of Mathematics, Georgia State University. Invited talk. Colloquium. Can Mathematical Models Predict the outcomes of prostate cancer patients undergoing intermittent androgen deprivation therapy?

70. March 23-25, 2015. RAPIDD Ebola workshop, NIH, Bethesda, MD. Invited talk. Title: Implications of Logistic Equation Based Spatial Ebola Epidemics Forecasting Models.

71. January 30, 2015. Department of Health and Human Services Ebola Modeling Coordination Group Meeting. Web-based Invited talk. Talk title: Data-Based Spatiotemporal Models of Ebola Epidemics and Control.

72. Dec. 20, 2014. Workshop on Mathematical Biology and Nonlinear Analysis, December 19 - December 21, 2014, The University of Miami, Coral Gables, Florida. Invited talk. Title: A data-validated density-dependent diffusion model of glioblastoma growth.

73. Nov. 20, 2014. Workshop on Cancer and the Immune System, November 17-21, 2014, at the Mathematical Biosciences Institute at Ohio State University. Invited talk. Title: A mathematical model for the immunotherapy of advanced prostate cancer.

74. October 31, 2014. Department of Health and Human Services Ebola Modeling Coordination Group Meeting. Web-based Invited talk. Talk title: Forecasts of Ebola in W. Africa and comparison to historical outbreaks.

75. June 12, 2014. Colloquium Talk at the Faculty of Science and Technology, University of Macau, Macau, China. Title: Dynamics and clinical implications of some models of hepatitis B virus infection

76. May 28, 2014. Plenary Speaker at the International Conference on Nonlinear Differential and Difference Equations: Recent Developments and Applications, Ankara University, Side, Antalya, Turkey, May 27-30. (http://icndde.ankara.edu.tr/ps.html). Title: Dynamics and Implications of a Model of Hepatitis B Virus Infection with Time Delay.

77. May 23, 2014. Colloquium Talk. University of Szeged, Szeged, Hungary. Title: Delay Differential Equation Models in Biology and Medicine.

78. May 15, 2014. Invited special seminar at the Department of Computational Science & Engineering, Yonsei University, Seoul, Korea. Title: Dynamics and Implications of a Model of Hepatitis B Virus Infection with Time Delay?

79. May 14, 2014. Application of ecological and mathematical theory to cancer: new challenges. in National Institute for Mathematical Sciences (NIMS), Daejeon, Korea. Title: Can Mathematical Models Predict the PSA levels of prostate cancer patients undergoing androgen suppression therapy?

80. April 21, 2014. Applied Maths colloquium: University of Western Ontario, London, Canada. Title: Can Mathematical Models Predict the outcomes of prostate cancer patients undergoing intermittent androgen suppression therapy?

81. March 19, 2014. Invited talk at the NIMBioS Investigative Workshop - Vectored Plant Viruses, Knoxville, Tennessee. Title: A Stoichiometric Modeling Framework for Cell Growth and Pathogen Replication.

82. Feb. 26, 2014. Applied Mathematics talk at King Abdulaziz University, Jeddah, Saudi Arabia. Title: Mathematical Modeling of Melanoma: Tumor-immune interaction, surgical treatment, and cancer recurrence in a mathematical model of melanoma.

83. Feb. 24, 2014. Colloquium talk at King Abdulaziz University, Jeddah, Saudi Arabia. Title: What we eat matters: The importance of resource quality in mathematical models.

84. Jan. 22, 2014. Colloquium talk at The University of Portsmouth, Portsmouth, UK. Title: Prostate cancer hormone treatment outcome prediction based on a clinical data validated mathematical model.

85. June 26, 2013. Applied Mathematics talk at King Abdulaziz University, Jeddah, Saudi Arabia. Title: Dynamics and implications of a delay differential model of hepatitis B virus infection.

86. June 24, 2013. Colloquium talk at King Abdulaziz University, Jeddah, Saudi Arabia. Title: Prostate cancer hormone treatment outcome prediction based on a clinical data validated mathematical model.

87. May 23, 2013. SIAM conference on applications of dynamical systems, Snowbird, Utah. (minisymposium organizer). Title: Immunotherapy with Androgen Deprivation Therapy May Stabilize Prostate Cancer.

88. November 7, 2012. Keynote talk at BIOMAT 2012, Tempe, AZ. Title: A mathematical model for the immunotherapy of advanced prostate cancer.

89. October 15, 2012. Invited talk at Fred Hutchinson Cancer Research Center Nelson Lab Meeting. Title: Mathematical models may predict continuous and intermittent androgen suppression treatment outcomes.

90. October 1, 2012. Colloquium at the Department of Mathematics, Washington State University. Title: Clinical implications of a data validated mathematical model of advanced prostate cancer growth under intermittent androgen suppression therapy.

91. August 31, 2012. Invited talk at Center for Biosignatures Discovery Automation, Biodesign Institute, Arizona State University. Title: Mathematical model of prostate cancer growth under intermittent androgen suppression therapy.

92. July 1, 2012. The 9th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Title: A data driven spatiotemporal rabies model for skunk and bat interaction in Northeast Texas.

93. July 1, 2012. The 9th AIMS Conference on Dynamical Systems, Differential Equations and Applications. Title: A clinical data validated mathematical model of prostate cancer growth with hormone therapy.

94. May, 2012. Invited talk at Fred Hutchinson Cancer Research Center Modeling Seminar. Title: Mathematical models may predict intermittent androgen suppression treatment outcomes.

95. April 26, 2012. Keynote talk at Northern California Pre-Tenure Faculty Forum, The University of the Pacific. Title: Publish or Perish in Mathematics and Sciences.

96. November 16, 2011. Invited Special Session talk at the 2011 SIAM Conference on Analysis of Partial Differential Equations. Title: Virtual Melanoma: When, Where and How Much to Cut.

97. November 9, 2011. Keynote talk at NIMBioS Investigative Workshop Free-roaming Cats and Rabies, 2011. Title: A simple spatiotemporal rabies model for skunk and bat interaction in Northeast Texas.

98. July 29, 2011. Keynote talk at The 5th Geoffrey J. Butler Memorial Conference on Differential Equations and Population Biology at the University of Alberta in Edmonton, from July 25-30, 2011. Title: Predictive Multiscale Models of Prostate Cancer Treatment by Androgen Deprivation.

99. July 22, 2011. Invited talk at the Prostate Cancer Modeling Symposium at the Vancouver Prostate Cancer Center. Title: Prostate Cancer in a Multi-scale and Clinical Data Validated Mathematical Model.

100. July 21, 2011. Invited talk at the Prostate Cancer Modeling Min-Symposium at the 7th International Congress on Industrial and Applied Mathematics - ICIAM 2011, Vancouver. Title: The Evolutionary Impact of Androgen Levels on Prostate Cancer in a Multi-scale Mathematical Model.

101. July 21, 2011. Invited talk at the Microbial Ecology Mini-Symposium at the the 7th International Congress on Industrial and Applied Mathematics - ICIAM 2011, Vancouver. Title: Modeling Algal Lipid Production with Empirical Data.

102. June 7, 2011. Invited talk at the workshop on the physics of tumor heterogeneity June 5-7, 2011, Princeton University. Title: Heterogeneity and Evolution in a Mathematical Model of Lung Tumor.

103. Jan. 28, 2011. Invited colloquium talk at North Carolina State University. Title: What we eat matters: Resource quality dynamics and its implications.

104. Nov. 25, 2010. Invited colloquium talk at University of Victoria, Canada. Title: What we eat matters: Resource quality dynamics and its applications.

105. June 4, 2010. Invited talk at Korean Applied Mathematical Summer Workshop, South Korea. Title: Mathematical modeling of melanoma.

106. June 3, 2010. Invited mathematical biology seminar talk at Kyungpook National University, South Korea. Title: Dynamics of a delay differential model of hepatitis B virus infection.

107. June 1, 2010. Invited colloquium talk at Kyungpook National University, South Korea. Title: Models with explicit resource quality dynamics and their implications.

108. Jan. 22, 2010. Invited talk at Applied Science Seminar Series of ASU Polytechnic. Title: Resource Driven Multi-scale Spatiotemporal Cancer Models And Their Applications in Cancer Treatments.

109. Jan. 5, 2010. Invited talk at the First International Workshop on Mathematical Methods in Systems Biology, Tel Aviv, Israel, 2010. Title: Tumor-Immune Interaction, Surgical Treatment, and Cancer Recurrence in a Mathematical Model of Melanoma.

110. December 10, 2009. Colloquium at the Department of Mathematical Sciences, Rensselaer Polytechnic Institute. Title: Resource Driven Multi-scale Spatiotemporal Cancer Models And Their Applications in Cancer Treatments.

111. August 24, 2009. Plenary speaker at the Workshop for Young Researchers in Mathematical Biology, MBI, Ohio State University, Columbus. Title: Resource Driven Multi-scale Spatiotemporal Cancer Models And Their Applications in Cancer Treatments.

112. June 19, 2009. Delivered an invited talk at the MTBI summer workshop.

113. October 24, 2008. Gave an invited talk at the AMS meeting in Huntsville.

114. October 16, 2008. Gave a colloquium at the Department of Biomathematics, UCLA.

115. October 15, 2008. Gave a math biology seminar at Georgia Institute of Technology (invited also to give a colloquium).

116. October 6, 2008. Gave an invited applied mathematics talk at University of Southern California.

117. September 18, 2008. gave a colloquium at University of Iowa.

118. June 9, 2008. Delivered an invited talk at the MTBI summer workshop.

119. June 6, 2008. Delivered an invited talk at the meeting on Mathematical Tools for Multi-Scale Biological Processes, held in Bozeman, MT.

120. May 19-20, 2008. Delivered two invited talks at the AIMS 7th meeting in Arlington, Texas.

121. May 2, 2008. Delivered an invited talk at the AMS regional meeting in Claremont Colleges.

122. April 23, 2008. Delivered a colloquium at the department of mathematics of Claremont College.

123. April 22, 2008. Delivered an invited lecture at the department of mathematics of Pomona College.

124. April 11, 2008. Delivered a colloquium at the department of mathematics of University of Louisville.

125. March 1, 2008. Delivered an invited talk at the Arizona UNM days meeting at University of New Mexico, Albuquerque, New Mexico.

126. Oct. 5-7, 2007. Delivered an invited talk at the Meeting of Mathematical Modeling and Analysis of Populations in Biological Systems at University of Arizona, Tucson, Arizona.

127. June 25, 26, 2007. Delivered 4 invited lectures at the Delay differential mini-course at University of Utah, Salt Lake City, Utah.

128. June 13, 2007. MTBI summer workshop invited lectures.

129. May 29, 2007. Keynote speaker at the 4th International Mathematical Biology Conference, Wuyishan City, China, May 29-June 1.

130. May 23, 2007. Invited speaker at the EcoSummit, Beijing, China.

131. May 25, 2007. Invited lecture at Beijing University of Science and Technology, China.

132. April 11, 2007. Invited lecture at Iowa State University, Ames, Iowa.

133. Spet 29, 2006. Invited speaker at the Midwest Quantitative Biology Conference, Michigan State University.

134. Spet 18, 2006. Distinguished Mathematical Colloquium, The University of Texas-Pan American.

135. Aug. 2, 2006. SMB-SIAM life sciences joint annual meeting at Raleigh, North Carolina.

136. July 11, 2006. SIAM Annual Meeting, July 10-14, 2006, at the Boston Park Plaza Hotel and Towers in Boston, Massachusetts.

137. June 29, 2006. Invited global ecology workshop lecture. Mathematical Biosciences Institute, Ohio State University, Columbus.

138. June 4, 5, 2006. MTBI summer workshop invited lectures.

139. Nov. 21, 2005. Mathematical Biology Seminar. Mathematical Biosciences Institute, Ohio State University, Columbus.

140. Oct. 21, 2005. University of Nebraska, Lincoln, Mathematical Ecology Special Session, AMS reginal meeting.

141. Aug. 28, 2005. Iowa State University, Ames, Iowa. Applied and Computational Mathematics Seminar.

142. April 18, 2005. University of California, Irvine. Applied mathematics colloquium talk.

143. April 9, 2005. Texas Tech University, Lubbock. AMS special session talk.

144. March 28, 2005. University of Michigan, distinguished mathematical biology talk.

145. March 4, 2005. California State University at Fresno, distinguished interdisciplinary mathematics talk.

146. Feb. 25, 2005. Colloquium talk. Purdue University.

147. Feb 11, 2005. Colloquium talk. Penn State University, College Station.

148. Society of Mathematical Biology Annual Meeting, July 25-28, 2004. University of Michigan.

149. AIMS' Fifth International Conference on Dynamical Systems and Differential Equations,Pomona, June 16 - 19, 2004.

150. June 4, 2004. Colloquium talk. Stanford University.

151. March 4, 2004. Colloquium talk. University of Colorado, Boulder.

152. Jan. 31, 2004. Center for Nonlinear Studies, Los Alamos National Lab.

153. Oct. 15, 03, University of Michigan, distinguished mathematical biology talk.

COLLABORATED POSTDOCTORAL ASSOCIATES/VISITING PROFESSORS:

Recent Visiting scholars: 1) Sang Uk Ryu, Associate Professor, Department of Mathematics, Jeju National University, 2012-2013; 2) Yongzhen Pei, Associate Professor, Department of Mathematics, School of Science, Tianjin Polytechnic University, China, 2012-2013. 3) Binghui Guo, Assistant Professor, Department of Mathematics, Beihang University, China, July, 2013-July, 2014. 4) Zijun Wen, Associate Professor, Department of Mathematics, Lanzou University, China, September, 2014-September, 2015. 5) Meng Fan, Professor, School of Mathematics and Statistics, Northeast Normal University, China, December, 2014-June, 2015 6) Cuiping Li, Professor, School of Mathematics and Statistics, Beihang University, China, January-February, 2016 7) Karam Allali, Associate Professor, Universit Hassan II de Casablanca, Morocco, July, 2016-September, 2016. 8) Daozhou Gao, Professor, Shanghai Normal University, June, 2017-July, 2017. 9) Ardak Kashkynbayev, Assistant professor, Nazarbayev University, Astana, Kazakhstan. March 14-23, 2018. 10) Ozlem Ozturk Mizrak, Ph.D student, University of Ankara. Feb. 2018-Jan. 2019. 11) Lidan Liu, Ph.D student, Northeast Normal University, China. Aug. 2019-Sept. 2020. 12) Zhongcai Zhu, Ph.D student, Guangzhou University, China. Sept. 2019-Sept. 2020.

Postdoctoral associates: 1). Yunkun Li (01-02), 2). Tzy-Wei Hwang (02-03), 3). Meng Fan (03-04), 4). Hao Wang (07), 5). Craig Thalhauser (07), 6). Abdessamad Tridane (07-08), 7). Kaifa Wang (08-09).

GRADUATE COURSES TAUGHT:

- APM 533: Mathematical Biology, I (ODE, difference equation, delay equation and stochastic process models).

- APM 534: Mathematical Biology, II (PDE models).
- APM 535: Mathematical models in medicine.
- MAT 591: Industry Frontiers, seminar course.
- MAT 598: Applied Delay Differential Equations.
- MAT 591: Mathematical Biology Seminar.
- MAT 575: Advanced Ordinary Differential Equations II.
- MAT 574: Advanced Ordinary Differential Equations I.
- MAT 475: Differential Equations and Dynamical Systems.
- MAT 462: Partial Differential Equations.
- MAT 461: Applied Complex Analysis.
- MAT 460: Applied Real Analysis.
- MAT 451: Mathematical Population Dynamics.

SEMINARS ORGANIZED:

- Industry Frontiers, seminar course, 2002-2005.
- Mathematical Biology, 1988-.
- Mathematical Medicine, 2004-.

PROFESSIONAL ACTIVITIES:

(1): Presented many **invited and keynote** lectures at various universities, international and national conferences.

(2): Current and past member of the conference organizational and scientific committees for numerous national and international conferences, including the first SMB-CSMB meeting held in June, 2009, in China; the first international workshop on Mathematical Methods in Systems Biology, Jan. 4-7, 2010, Tel Aviv, Israel; the first international workshop on Differential and Integral Equations with Applications in Biology and Medicine Karlovassi, Samos, Greece, 7-10 September, 2010, the first international workshop Mathematical Methods in Systems Biology at the African Institute of Mathematical Sciences (AIMS) in Cape Town, South Africa(http://www.aims.ac.za/).

I served as a co-chair of the International Conference on Mathematical Biology, Wuyi, China, May-June, 2007. I was a member of the conference organizational committee for the International Conference on Mathematical Biology, held in HangZhou, China, May 26-29, 1997 and Guiling, 2002.

(3): Organized the Workshop on Mathematical Models in Biology and Medicine at ASU in 2006.

(4): Organized many special sessions and mini-symposiums in international conferences (ICIAM-91, Washington, D.C.; Pacific Rim Dynamics Conf., Maui, 2000; SIAM Snowbird dynamical system conference, May 20-24, 2001; AMS-SIAM Annual Meeting, Jan. 6-9, 2004, Phoenix; Fifth AIMS conference, June 16-19, 2004, Pomona; WCNA 2004, June 30-July 7, 2004; Society of Mathematical Biology Annual Meeting, July 25-28, 2004), at ASU(Mini-symposium on Nonlinear

Analysis and Biological Modeling, Oct. 13-14, 1992 at ASU), and at ASU(Mini-symposium on Math. Biol. and Delay Equations, May 27, 1996 at ASU).

(5): Refereeing numerous NSF proposals in U.S. and proposals from many other countries.

(6): Reviewed for Mathematical Reviews and ZENTRALBLATT.

(7): Refereed book proposals for Academic Press, Prentice Hall, etc.

(8): Refereed a total of several hundreds papers for

Mathematical Biology related: 1) American Naturalist; 2) J. Math. Biol.; 3) Theoretical Population Biology; 4) Math. Biosci.; 5) Math. Biosc. Eng. ; 6) Applied Math. Letter; 7): Bull. Math. Biol.; 8)SIAM J. Appl. Math..; 9). J. Biological Systems; 10). J. Biological Dynamics, etc.
Applied Math.: 1) SIAM J. Math. Anal.; 2) J. Math. Anal. Appl.; 3) J. Differential Equations; 4) Canadian Applied Math. Quarterly; 5) Discrete and Continuous Dynamical Systems; 6) Proceedings of AMS; 7) Proceedings of Royal Soc. Edinburgh A.; 8) Nonlinear Analysis, ATM; 9)Rocky Mount. J. Math; 10) DCDS-B, etc.

PROFESSIONAL AFFILIATIONS:

Life time member of the Society of Integrative and Comparative Biology, 2005-
The American Association for the Advancement of Science, 2005-2009
Society for Mathematical Biology, 2000-
The New York Academy of Science, 1993-1994.
American Mathematics Society, 85-88.
Canadian Mathematical Society, 86-88.
Canadian Applied Mathematical Society, 86-88, 92-94.
American Mathematical Association, 87-88.
Society for Industrial and Applied Mathematics, 87-88, 91-92, 2001-2002, 2015-2016.

DISSERTATIONS:

1. *Several Algorithms for Quadratic Programming and the Comparisons Among Them*, Thesis for B.Sc. in U. of Sci. & Tech. of China, 1984, (in Chinese), 44 pages.

2. *Limit Cycles in Gause-Type Predator-Prey Systems*, Ph.D. thesis, University of Alberta, Canada, 1988, 110 pages.

BOOKS:

1. Yang Kuang, Meng Fan, Shengqiang Liu, Wanbiao Ma, 2019. *Dynamical Models of Biology and Medicine*. Printed Edition of the special issue edited by the authors published in Applied Sciences, MDPI.

2. Yang Kuang, John D. Nagy, and Steffen E. Eikenberry, *Introduction to Mathematical Oncology*, published on Feb. 18, 2016 by Chapman and Hall/CRC, ISBN 9781584889908 - CAT# C990X. Textbook, 470 Pages. In Series: Chapman & Hall/CRC Mathematical and Computational Biology.

3. Y. Kuang and E. Kase: *Pre-Calculus for Dummies*, 2nd edition, Wiley, June, 2012. (408 pages, ISBN: 9781118168882).

4. Yang Kuang and Michelle Rose Gilman, *Pre-Calculus Workbook For Dummies*, 360 pages. John Wiley & Sons, March 2011, eBook release: April, 2011, ISBN: 978-0-470-92322-1.

5. Yang Kuang, *Delay Differential Equations with Applications in Population Dynamics,* volume 191 in the series of Mathematics in Science and Engineering, Academic Press. 1993. (398 pages)

EDITED BOOKS AND SPECIAL ISSUES:

1. Lansun Chen, Yang Kuang, Shigui Ruan and Glenn Webb, Advances in Mathematical Biology, a special issue (vol 4, #3, 2004) of DCDS-B.

2. Lansun Chen, Meng Fan, Yang Kuang and Huaiping Zhu, Proceedings of 4th International Conference on Mathematical Biology, a special issue (vol 1, issue 2, 2008) of International Journal of Biomathematics (IJB).

3. Lansun Chen, Meng Fan, Yang Kuang and Huaiping Zhu, Proceedings of 4th International Conference on Mathematical Biology, a special issue (vol 1, issue 3, 2008) of International Journal of Biomathematics (IJB).

4. Lansun Chen, Meng Fan, Yang Kuang and Huaiping Zhu, Proceedings of 4th International Conference on Mathematical Biology, a special issue (vol 38, issue 5, 2008) of Rocky Mountain Journal of Mathematics.

5. Carlos Castillo-Chvez, Christopher Kribs Zaleta, Yang Kuang and Baojun Song, A tribute to the mathematical epidemiology work of Fred Brauer and Karl Hadeler, a special issue (vol 6, issue 2, 2009) of Math. Biosci. Eng.

6. Yang Kuang, Jiaxu Li, Bingtuan Li, Urszula Ledzewicz and Ami Radunskaya, A special issue on dynamical systems in biology and medicine, a special issue (vol 12, issue 2, Sept., 2009) of DCDS-B.

7. Yang Kuang, Michael Li, Shigui Ruan, Hao Wang and Jianhong Wu, 2013. Dynamical systems in biology and medicine, 2 special issues of Canadian Applied Mathematics Quarterly.

8. Athena Makroglou, Gennady Bocharov, Alistair Fitt, George Flessas, Yang Kuang and Antonios Tsokaros, 2014. Differential and Integral Equations with Applications in Biology and Medicine, a special issue of MATHEMATICS AND COMPUTERS IN SIMULATION VOLUME 96 , FEBRUARY 2014.

9. Yang Kuang, Meng Fan, Shengqiang Liu, Wanbiao Ma, 2016. Dynamical Models of Biology and Medicine. A special issue of Applied Sciences.

10. Yang Kuang, Angela Peace and Hao Wang, 2019. Resource Explicit Population Models. A special issue of Math. Biosci. Eng., January 2019.

11. Fathalla A. Rihan, Yang Kuang, Gennady Bocharov, 2019. DCDS-S Special Issue "Delay Differential Equations: Theory, Applications and New Trends."

12. Yang Kuang, Kevin Flores, Erica Rutter, 2020. Applied Sciences Special Issue on Dynamical Models of Biology and Medicine, II.

13. Yang Kuang, Kevin Flores, Erica Rutter, 2022-24. Applied Sciences Special Issue on Dynamical Models of Biology and Medicine, III.

The following publication list excludes several submitted papers.

REFEREED PUBLICATIONS:

209. Amy E. Kendig, Eric W. Seabloom, Bruce Pell, Yang Kuang, and Elizabeth T. Borer, 2024. Within-plant coexistence of viruses across nitrogen and phosphorus supply rates. Ecosphere. in press.

208. H.G. Anderson, G.P. Takacs, D.C. Harris, Y. Kuang, J.K. Harrison and T.L. Stepien, 2024. Global stability and parameter analysis reinforce therapeutic targets of PD-L1-PD-1 and MDSCs for glioblastoma. J. Math. Biol., 88:10. Open access.

207. T. Phan, S. Brozak, B. Pell, J. Oghuan, A. Gitter, T. Hu, R. M. Ribeiro, R. Ke, K. D. Mena, A. S. Perelson, Y. Kuang, F. Wu, 2023. Making waves: Integrating wastewater surveillance with dynamic modeling to track and predict viral outbreaks, Water Research. doi: https://doi.org/10.1016/j.watres.2023.120372

206. D. C. Harris, C. He, M. C. Preul, . J. Kostelich, Y. Kuang, 2023. Critical patch size of a two- population reaction diffusion model describing brain tumor growth. SIAM J. Appl. Math., s249-s268.

205. C. He, L. Han, D. C. Harris, X. Wang, S. BayakhmetovY. Kuang, 2023. Reaction-diffusion modeling of e-coli colony growth based on nutrient distribution and agar dehydration. Bell. Math. Biol., 85:61.

204. T. Phan, A. Weber, A. H. Bryce, Y. Kuang, 2023. The prognostic value of androgen to PSA ratio in predictive modeling of prostate cancer. Medical Hypotheses, 176,111084.

203. B. Pell, S. Brozak, T. Phan, F. Wu, Y. Kuang. 2023. The emergence of a virus variant: dynamics of a competition model with cross-immunity time-delay validated by wastewater surveillance data for COVID-19. J. Math. Biol., 86, 63. https://doi.org/10.1007/s00285-023-01900-0.

202. S. Shi, J. Huang, Y. Kuang, S. Ruan, 2023. Stability and Hopf bifurcation of a tumor-immune system interaction model with an immune checkpoint inhibitor. Communications in Nonlinear Science and Numerical Simulation, Volume 118, 106996.

201. A. Tursynkozha, A. Kashkynbayeva, B. Shupeyeva, E. M. Rutter and Y. Kuang, 2023. Traveling wave speed and profile of a go or grow glioblastoma multiforme model. Communications in Nonlinear Science and Numerical Simulation, Volume 118, 107008.

200. T. Phan, JJ. Elser, Y. Kuang. 2023. Rich Dynamics of a general producergrazer interaction model under shared multiple resource limitations. Applied Sciences 13, no. 7: 4150. (2.6m pdf). https://doi.org/10.3390/app13074150

199. T. Phan, S. Brozak, B. Pell, A. Gitter, A Xiao, K. D. Mena, Y. Kuang, F. Wu, 2022. A simple SEIR-V model to estimate COVID-19 prevalence and predict SARS-1 CoV-2 transmission using wastewater-based surveillance data. Science of the Total Environment. doi.org/10.1016/j.scitotenv.2022.159326

198. J. Isanta-Navarro, C. Prater, L. M. Peoples, I. Loladze, T. Phan, P. D. Jeyasingh, M, J. Church, Y. Kuang, J. J. Elser, 2022. Revisiting the growth rate hypothesis: Towards a holistic stoichiometric understanding of growth, Ecological Letters, 25: 23242339. DOI: 10.1111/ele.14096.

197. W. Meade, A. Weber, T. Phan, E. Hampston, L. F. Resa, J. Nagy and Y. Kuang, 2022. High accuracy indicators of androgen suppression therapy failure for prostate cancera modeling study. Cancers, Vol. 14 Issue 16 10.3390/cancers14164033.

196. T. Phan, C. He, I. Loladze, C. Prater, J. Elser, and Y. Kuang, 2022. Dynamics and growth rate implications of ribosomes and mRNAs interaction in E. coli, Heliyon, 8(2022)e09820.

195. Lifeng Han, Changhan He, Huy Dinh, John Fricks, Yang Kuang, 2022. Learning biological dynamics from spatio-temporal data by Gaussian processes, Bulletin of Mathematical Biology

84:69. https://doi.org/10.1007/s11538-022-01022-6.

194. Duane C. Harris, Giancarlo Mignucci-Jimnez, Yuan Xu, Steffen E. Eikenberry, C. Chad Quarles, Mark C. Preul, Yang Kuang, Eric J. Kostelich, 2022. Existence of traveling wave solutions to data-driven glioblastoma multiforme growth models with density-dependent diffusion. Mathematical Biosciences and Engineering, 19 (6): 54465481. DOI: https://doi.org/10.3934/mbe.2022256.

193. Hews S, Eikenberry S, Nagy JD, Phan T, Kuang Y., 2021. Global Dynamics and Implications of an HBV Model with Proliferating Infected Hepatocytes. Applied Sciences. 2021; 11(17):8176. https://www.mdpi.com/2076-3417/11/17/8176.

192. T. Phan, C. DeMarino, F. Kashanchi, Y. Kuang, D. Anderson, and M. Emelianenko. 2021. Characterizing transcriptional dynamics of HIV-1 in T-Cells and macrophages using a three-state LTR model. Letters in Biomathematics 8 (1), 133150. https://lettersinbiomath.journals.publicknowledgep

191. J. Melendez-Alvarez, C. He, R. Zhang, Y. Kuang and X.-J. Tian, 2021. Emergent damped oscillation induced by nutrient-modulating growth feedback. ACS Synth. Biol. 2021, 10, 5, 12271236. https://doi.org/10.1021/acssynbio.1c00041

190. C. He, S. Bayakhmetov, D. Harris, Y. Kuang and X. Wang, 2021. A predictive reaction-diffusion based model of E. coli colony growth control. IEEE Control Systems Letters, 5, 1952-1957. doi: 10.1109/LCSYS.2020.3046612.

189. Angela Peace, Paul C Frost, Nicole D Wagner, Michael Danger, Chiara Accolla, Philipp Antczak, Bryan W Brooks, David M Costello, Rebecca A Everett, Kevin B Flores, Christopher M Heggerud, Roxanne Karimi, Yun Kang, Yang Kuang, James H Larson, Teresa Mathews, Gregory D Mayer, Justin N Murdock, Cheryl A Murphy, Roger M Nisbet, Laure Pecquerie, Nathan Pollesch, Erica M Rutter, Kimberly L Schulz, J Thad Scott, Louise Stevenson, Hao Wang, Stoichiometric ecotoxicology for a multisubstance world, BioScience, 2021;, biaa160, https://doi.org/10.1093/biosci/biaa160.

188. T. Reckell; Nguyen, T. Phan, S. Crook, E. J. Kostelich, and Y. Kuang, 2021. Modeling the synergistic properties of drugs in hormonal treatment for prostate cancer, J. Theor. Biol., 514 (2021) 110570.

187. E. Nikolopoulou, S. E. Eikenberry, J. L. Gevertz, Y. Kuang 2020. Mathematical modeling of an immune checkpoint inhibitor and its synergy with an immunostimulant. Discrete & Continuous Dynamical Systems-B. 26 (4), 2133-2159. doi: 10.3934/dcdsb.2020138. doi: 10.3934/dcdsb.2020138.

186. S. Shi, J. Huang, Y. Kuang 2020. Global dynamics in a tumor-immune model with an immune checkpoint inhibitor, Discrete & Continuous Dynamical Systems-B. 26 (2), 1149-1170.

185. T. Phan, B. Pell, A. E. Kendig, E. T. Borer, Y. Kuang, 2020. Rich dynamics of a simple delay host-pathogen model of cell-to-cell infection for plant virus. Discrete & Continuous Dynamical Systems-B, 26 (1): 515-539.

184. L. Han, C. He, Y. Kuang, 2020. Dynamics of a model of tumor-immune interaction with time delay and noise. Discrete & Continuous Dynamical Systems - S, doi: 10.3934/dcdss.2020140.

183. L. Dickman, Y. Kuang, 2020. Analysis of tumor-immune dynamics in a delayed dendritic cell therapy model, Chaos, 30, 113108 (2020); doi: 10.1063/5.0006567

182. Ardak Kashkynbayev, Yerlan Amanbek, Bibinur Shupeyeva, Yang Kuang 2020. Existence of traveling wave solutions to data-driven glioblastoma multiforme growth models with density-dependent diffusion. Mathematical Biosciences and Engineering, 17 (6): 72347247. DOI: 10.3934/mbe.2020371.

181. Y. Kuang and K.Wang, 2020. Coexistence and extinction in a data-based ratio-dependent model of an insect community, Mathematical Biosciences and Engineering, 17(4): 3274-3293. doi: 10.3934/mbe.2020187.

180. S. E. Eikenberry, M. Mancuso, E. Iboi, T. Phan, K. Eikenberry, Y. Kuang, E. Kostelich, and A. B. Gumel 2020. To mask or not to mask: Modeling the potential for face mask use by

the general public to curtail the COVID-19 pandemic.Infectious Disease Modeling 5, 293-308.

179. T, Phan, S, M. Crook, A, H. Bryce, C, C. Maley, E, J. Kostelich and Y. Kuang, 2020.Review: Mathematical Modeling of Prostate Cancer and Clinical Application. Appl. Sci., 10(8), 2721; https://doi.org/10.3390/app10082721.

178. L. R. Dickman, E. Milliken, Y. Kuang 2020. Tumor control, elimination, and escape through a compartmental model of dendritic cell therapy for melanoma. SIAM J. Appl. Math., 80, pp. 906-928.

177. T. L. Stepien, E. J. Kostelich, Y. Kuang, 2020. Mathematics + Cancer: An Undergraduate "Bridge" Course in Applied Mathematics, SIAM Review, 62, pp. 244263.

176. O. O. Mizrak, C. Mizrak, A Kashkynbayev, Y. Kuang 2020. Can fractional differentiation improve stability results and data fitting ability of a prostate cancer model under intermittent androgen suppression therapy? Chaos, Solitons and Fractals, 131, 109529.

175. C. DeMarino, M. Cowen, M. L. Pleet, D. O. Pinto, P. Khatkar, J. Erickson, S. S. Docken, N. Russell, B. Reichmuth, T. Phan, Y. Kuang, D. M. Anderson, M. Emelianenko, F. Kashanchi 2020. Differences in transcriptional dynamics between T-cells and macrophages as determined by a three-state mathematical model. Scientific Report.

174. Z. Wu, T. Phan, J. Baez, Y. Kuang, E. J. Kostelich, 2019. Predictability and identifiability assessment of models for prostate cancer under androgen suppression Therapy, Math. Biosci. Eng., 16(5): 35123536.

173. L. Han, S. Eikenberry, C. He, L. Johnson, M. C. Preul, E. J. Kostelich, Y. Kuang, 2019. Patient-specific parameter estimates of glioblastoma multiforme growth dynamics from a model with explicit birth and death rates, Mathematical Biosciences and Engineering, 16(5): 5307-5323. doi: 10.3934/mbe.2019265.

172. Q. An, E. Beretta, Y. Kuang, C. Wang, H. Wang, 2019. Geometric stability switch criteria in delay differential equations with two delays and delay dependent parameters, J. Differential Equations, 266, Issue 11, 7073-7100.

171. R. Jennings, Y. Kuang, H. R. Thieme, J. Wu, X. Wu, 2019. How ticks keep ticking in the adversity of host immune reactions, J. Math. Biol. 78 (2019), no. 5, 13311364.

170. T. Phan, K. Nguyen, P. Sharma, Y. Kuang, 2019. The impact of intermittent androgen suppression therapy in prostate cancer modeling. Applied Sciences 9 (1), 36.

169. B. Pell, A. E. Kendig E. T. Borer, Y. Kuang, 2019. Modeling nutrient and disease dynamics in a plant-pathogen system, Math. Biosc. Eng., 16, 234-264.

168. T. Phan, C. He, A. Martinez, Y. Kuang, 2019. Dynamics and implications of models for intermittent androgen suppression therapy, Math. Biosc. Eng., 16, 187-204.

167. Tracy L. Stepien, Erica M. Rutter, and Yang Kuang, 2018. Traveling waves of a go-or-grow model of glioma growth, SIAM J. Appl. Math., 78(3), 17781801.

166. B. Pell, T. Phan, E. M. Rutter, G. Chowell, Y. Kuang, 2018. Simple multi-scale modeling of the transmission dynamics of the 1905 plague epidemic in Bombay, Math. Biosc., 301, 83-92.

165. E. Nikolopoulou, L. R. Johnson, D. Harris, J. D. Nagy, E. C. Stites, Y. Kuang, 2018. Tumor-Immune Dynamics with an Immune Checkpoint Inhibitor. Letters in Biomathematics, DOI: 10.1080/23737867.2018.1440978.

164. B. Pell, Y. Kuang, C. Viboud, G. Chowell, 2017. Using phenomenological models for forecasting the 2015 Ebola Challenge, Epidemics, in press. (pdf 2mb, appeared online on 19 November 2016).

163. Shi, X., Kuang, Y., Makroglou, A., Mokshagundam, S. and Li, J. 2017. Oscillatory dynamics of an intravenous glucose tolerance test model with delay interval, Chaos 27, 114324.

162. K. Allali, J. Danane, Y. Kuang, 2017. Global analysis for an HIV infection model with CTL immune response and infected cells in eclipse phase. Appl. Sci. 2017, 7(8), 861; doi:10.3390/app7080861.

161. A. Alsheri1, E. O. Alzahrani, A. Asiri, M. M. El-Dessoky, and Y. Kuang, 2017. Tumor growth dynamics with nutrient limitation and cell proliferation time delay, DCDS-B, 22, 3771-3782.

160. Erica M. Rutter, Tracy L. Stepien, Barrett J. Anderies, Jonathan D. Plasencia, Eric C. Woolf, Adrienne C. Scheck, Gregory H. Turner, Qingwei Liu, David Frakes, Vikram Kodibagkar, Yang Kuang, Mark C. Preul, and Eric J. Kostelich, 2017. Mathematical analysis of glioma growth in a murine model, Scientific Report.

159. Ming Chen, Meng Fan, Yang Kuang, 2017. Global dynamics in a stoichiometric food chain model with two limiting nutrients, Mathematical Biosciences 289, 919.

158. E.M. Rutter and Y. Kuang, 2017. Global dynamics of a model of joint hormone treatment with dendritic cell vaccine for prostate cancer, DCDS-B, 22, 1001-1021.

157. Z. Wen, M. Fan, A. M. Asiri, E. O. Alzahrani, M. M. El-Dessoky and Y. Kuang, 2017. Global existence and uniqueness of classical solutions for a generalized quasilinear parabolic equation with application to a glioblastoma growth model, Math. Biosc. Eng., 14, 407 - 420.

156. J. Baez and Y. Kuang, 2016. Mathematical models of androgen resistance in prostate cancer patients under intermittent androgen suppression therapy, Appl. Sci. 2016, 6, 352; doi:10.3390/app6110352, open access at http://www.mdpi.com/2076-3417/6/11/352/pdf

155. Rebecca A. Everett, John D. Nagy and Yang Kuang, 2016. Dynamics of a data based ovarian cancer growth and treatment model with time delay, Journal of Dynamics and Differential Equations, 28: 1393-1414. DOI: 10.1007/s10884-015-9498-y. First online: 30 September 2015.

154. Y. Zhao, D. T. Wood, H. V. Kojouharov, Y. Kuang, D. T. Dimitrov, 2016. Impact of population recruitment on the HIV epidemics and the effectiveness of HIV prevention interventions, Bull Math Biol 78: 2057-2090. doi:10.1007/s11538-016-0211-z.

153. X. Yang, X. Li, H. Wang, and Y. Kuang, 2016. Stability and bifurcation in a stoichiometric producer-grazer model with nnife edge, SIAM J. on Applied Dynamical Systems 15 (4), 2051-2077.

152. Bruce Pell, Javier Baez, Tin Phan, Daozhou Gao, Gerardo Chowell, and Yang Kuang, 2016. Patch models of EVD transmission dynamics. In: Mathematical and Statistical Modeling for Emerging and Re-emerging Infectious Diseases, Chowell and Hyman eds. Springer, 147–167.

151. D. Gao, Y. Lou, D. He, T. C. Porco, Y. Kuang, G. Chowell, S. Ruan, 2016. Prevention and control of Zika as a mosquito-borne and sexually transmitted disease: A mathematical modeling analysis. Scientific Reports 6, Article number: 28070. doi:10.1038/srep28070.

150. E. O. Alzahrani and Y. Kuang, 2016. Nutrient Limitations as an Explanation of Gompertzian Tumor Growth, DCDS-B, 21:357-372.

149. T. L. Stepien, E. M. Rutter, and Y. Kuang, 2015. A data-motivated density-dependent diffusion model of in vitro glioblastoma growth, Math. Biosc. Eng., 12, 1157-1172.

148. C. Hu, Y. Kuang, B. Li and H. Liu, 2015. Spreading speeds and traveling wave solutions in cooperative integral-differential systems, DCDS-B, 20, 1663-1684.

147. Qilin Sun, Lequan Min, and Yang Kuang, 2015. Global stability of infection-free state and endemic infection state of a modified HIV infection model, IET Systems Biology, DOI: 10.1049/iet-syb.2014.0046.

146. Nikolay L. Martirosyan, Erica M. Rutter, Wyatt L. Ramey, Eric J. Kostelich, Yang Kuang, and Mark C. Preul, 2015. Mathematically Modeling the Biological Properties of Gliomas: A Review, Math. Biosc. Eng., 12:879-905.

145. Z. Bartoszewski, Z. Jackiewicz, Y. Kuang, 2015. Numerical solution of threshold problems in epidemics and population dynamics, Journal of Computational and Applied Mathematics, 279, 4056.

144. Yao Hu, Lequan Min and Yang Kuang, 2015. Modeling the dynamics of epidemic spreading on homogenous and heterogeneous networks, Applicable Analysis: An International

Journal, DOI: 10.1080/00036811.2014.983487.

143. EO Alzahrani, MM El-Dessoky, EM Elsayed, Y Kuang, 2015. Solutions and Properties of Some Degenerate Systems of Difference Equations. Journal of Computational Analysis & Applications 18 (2), 321-333.

142. Chowell G, Simonsen L, Viboud C, Kuang Y. 2014. Is West Africa approaching a catastrophic phase or is the 2014 Ebola epidemic slowing down? Different models yield different answers for Liberia. PLOS Currents Outbreaks. 2014 Nov 20. Edition 1. doi: 10.1371/currents.outbreaks. b4690859d91684da963dc40e00f3da81. PLOS Currents Outbreaks.

141. A. Peace, H. Wang and Y. Kuang, 2014. Dynamics of a producer-grazer model incorporating the effects of excess food-nutrient content on grazer's growth, Bull. Math. Biol., 76(9):2175-2197. DOI: 10.1007/s11538-014-0006-z.

140. R. A. Everett, A. Packer and Y. Kuang, 2014. Can Mathematical Models Predict the outcomes of prostate cancer patients undergoing intermittent androgen deprivation therapy?, Biophysical Reviews and Letters, 9:173-191.

139. H. Liu, A. Packer and Y. Kuang, 2014. Stoichiometric producer-grazer models with varying nitrogen pools and ammonia toxicity, DCDS-S, 7:1305-1320.

138. Dobromir Dimitrov, Yang Kuang, Benot R. Msse, 2014. Assessing the public health impact of HIV interventions: the critical role of demographics, JAIDS Journal of Acquired Immune Deficiency Syndromes 66 (2), e60-e62.

137. Jason D. Morken, Aaron Packer, Rebecca A. Everett, John D. Nagy, and Yang Kuang, 2014. Mechanisms of resistance to intermittent androgen deprivation in patients with prostate cancer identified by a novel computational method, Cancer Research, Published Online on May 22, 2014; doi: 10.1158/0008-5472.CAN-13-3162.

136. E. O. Alzahrani, Asim Asiri, M. M. El-Dessoky and Y. Kuang, 2014. Quiescence as an explanation of Gompertzian tumor growth revisited. Mathematical Biosciences, 2014, 254:76-82.

135. Z. Jackiewicz, H. Liu, B. Li and Y. Kuang, 2014. Numerical simulations of traveling wave solutions in a drift paradox inspired diffusive delay population model. Mathematics and Computers in Simulation 96: 95103.

134. X. Chen, L. Min, Y. Zheng, Y. Kuang, and Y. Ye, 2014. Dynamics of acute hepatitis B virus infection in chimpanzees, Mathematics and Computers in Simulation 96: 157-170.

133. A. Packer, J. Forde, S. Hews and Y. Kuang, 2013. Mathematical models of the interrelated dynamics of hepatitis D and B, Mathematical Biosciences 247, 38-46.

132. Travis Portz and Yang Kuang, 2013. A mathematical model for the immunotherapy of advanced prostate cancer, BIOMAT 2012, pp. 70-85. Edited by Rubem P Mondaini. World Scientific, doi: 10.1142/9789814520829_0005.

131. R. A. Everett, Y. Zhao, K. B. Flores, and Y. Kuang, 2013. Data and implication based comparison of two chronic myeloid leukemia models, Math. Biosc. Eng., 10:1501-1518.

130. A. L. Peace, Y. Zhao, I. Loladze, J. J. Elser and Y. Kuang, 2013. A stoichiometric producer-grazer model incorporating the effects of excess food-nutrient content on consumer dynamics, Math. Biosci., 244:107-115.

129. Yuqin Zhao, Dobromir T. Dimitrov, Hao Liu and Yang Kuang, 2013. Mathematical insights in evaluating state dependent effectiveness of HIV prevention interventions. Bulletin of Mathematical Biology, 75:649-675.

128. F Wang, Y Kuang, C Ding, S Zhang, 2012. Stability and bifurcation of a stage-structured predatorprey model with both discrete and distributed delays. Chaos, Solitons and Fractals, 46, 19-27.

127. Joshua Mc Daniel, Eric Kostelich, Yang Kuang, John Nagy, Mark Preul, Nina Z. Moore and Nikolay Matirosyan, 2012. Data Assimilation in Brain Tumor Models, pp227-254, Chapter 9

in Mathematical Methods and Models in Biomedicine, Urszula Ledzewicz, Heinz Schattler, Avner Friedman, Eugene Kashdan ed. Springer.

126. Rebecca K. Borchering, Hao Liu, Mara C. Steinhaus, Carl L. Gardner and Yang Kuang, 2012. A simple spatiotemporal rabies model for skunk and bat interaction in Northeast Texas. J. Theor. Biol., 314, 1622.

125. J. J. Elser, I. Loladze, A. L. Peace and Y. Kuang, 2012. Lotka re-loaded: modeling trophic interactions under stoichiometric constraints. Ecological Modelling, 245, 3-11.

124. Y. Kuang, 2012. Delay differential equations, Encyclopedia of Theoretical Ecology, Hastings and Gross ed. University of California Press, 163-166.

123. J. J. Elser and Y. Kuang, 2012. Ecological stoichiometry, Encyclopedia of Theoretical Ecology, invited contribution, Hastings and Gross ed. University of California Press, 718-722.

122. Travis Portz, Yang Kuang and John D. Nagy, 2012. A clinical data validated mathematical model of prostate cancer growth under intermittent androgen suppression therapy. AIP Advances, an open access journal (pdf 708k).

121. Eric J. Kostelich, Yang Kuang, Joshua M. McDaniel, Nina Z. Moore, Nikolay L. Martirosyan, Mark C. Preul. Accurate state estimation from uncertain data and models: an application of data assimilation to mathematical models of human brain tumors. Biology Direct, an open access journal (pdf 8.2m), 6:64 doi:10.1186/1745-6150-6-64, Published: 21 December 2011. Highly Accessed.

120. X. Li, H. Wang and Y. Kuang, 2011. Global analysis of a stoichiometric producer-grazer model with Holling type functional responses. J. Math. Biol., 63, 901-932, DOI 10.1007/s00285-010-0392-2. (pdf 942k).

119. Kaifa Wang and Y. Kuang, 2011. Fluctuation and extinction dynamics in host-microparasite systems, Comm. Pure Appl. Math., **10**, 1537-1548.

118. Aaron Packer, Yantao Li, Tom Andersen, Qiang Hu, Yang Kuang and Milton Sommerfeld, 2011. Growth and neutral lipid synthesis in green microalgae: a mathematical model. Bioresource Technology, **102**, 111-117.

117. Kaifa Wang and Y. Kuang, 2011. Novel dynamics of a simple Daphnia-microparasite model with dose-dependent infection, DCDS-S, **4**. 1599-1610.

116. Yu Zheng, Lequan Min, Yu Ji, Yongmei Su andYang Kuang. 2010. Global stability of endemic equilibrium point of basic virus infection model with application to HBV infection, Jrl Syst Sci & Complexity, **23**, 1221-1230

115. Steffen E. Eikenberry, John D. Nagy, and Yang Kuang. The evolutionary impact of androgen levels on prostate cancer in a multi-scale mathematical model. Biology Direct 2010, 5:24 doi:10.1186/1745-6150-5-24.

114. A. Tridane and Y. Kuang (2010). Modeling the Interaction of Cytotoxic T Lymphocytes and Influenza Virus Infected Epithelial Cells. Math. Biosc. and Eng., **7**, 175-189.

113. S. Hews, S. Eikenberry, J. D. Nagy and Y. Kuang (2010). Rich dynamics of a Hepatitis B viral infection model with logistic hepatocyte growth, J. Math. Biol., **60**, 573-590. DOI 10.1007/s00285-009-0278-35

112. Hao Wang, John D. Nagy, Olivier Gilg and Yang Kuang (2009). The roles of predator maturation delay and functional response in determining the periodicity of predatorprey cycles, Math. Biosci., **221**, 1-10.

111. Hao Wang, Katherine Dunning, J. J. Elser and Y. Kuang (2009). Daphnia species invasion, competitive exclusion, and chaotic coexistence, DCDS-B, **12**, 481-493.

110. S. Eikenberry, T. Sankar, M. C. Preul, E. J. Kostelich, C. Thalhauser and Y. Kuang (2009). The virtual glioblastoma: growth, migration, and treatment in a three-dimensional mathematical model. Cell Proliferation, **42**, 511-528. DOI: 10.1111/j.1365-2184.2009.00613.x

109. S. A. Gourley and Y. Kuang (2009). Dynamics of a neutral delay equation for an insect population with long larval and short adult phases, J. Diff. Equations, **246**, 4653-4669. doi:10.1016/j.jde.2008.11.018

108. Eikenberry S, Thalhauser C, Kuang Y (2009) Tumor-Immune Interaction, Surgical Treatment, and Cancer Recurrence in a Mathematical Model of Melanoma. PLoS Comput Biol **5**(4): e1000362. doi:10.1371/journal.pcbi.1000362.

107. Craig J. Thalhauser, Tejas Sankar, Mark C. Preul.and Y. Kuang: Explicit separation of growth and motility in a new tumor cord model, Bulletin of Math. Biol.,**71**, 585-601 (2009). DOI 10.1007/s11538-008-9372-8

106. Z. Jackiewicz, Y. Kuang, C. Thalhauser and B. Zubik-Kowal: Numerical solution of a model for brain cancer progression after therapy, Math. Modelling and Anal., **14**, 43-56 (2009).

105. S. Eikenberry, S. Hews, J. D. Nagy and Y. Kuang. The dynamics of a delay model of HBV infection with logistic hepatocyte growth, Math. Biosc. and Eng., **6**, 283-299 (2009).

104. J. Li and Y. Kuang: Systemically modeling the dynamics of plasma insulin in subcutaneous injection of insulin analogues for type 1 diabetes, Math. Biosc. and Eng., **6**, 41-58(2009).

103. H. Wang, J. Li and Y. Kuang: Enhanced modeling of the glucose-insulin system and its applications in insulin therapies, J. Biological Dynamics, **3**, 22-38 (2009).

102. Dunning, K. A., M. Kyle, Y. Kuang and J. J. Elser: A mathematical and empirical analysis of stoichiometric effects of light intensity on Daphnia dynamics and coexistence, The J. Young Investigators, vol. **19**, issue 7, http://www.jyi.org/research/re.php?id=1701 (2009).

101. H. Thieme, A. Tridane and Y. Kuang: An epidemic model with post-contact prophylaxis of distributed length. II. Stability and oscillations if treatment is fully effective, Mathematical Modelling of Natural Phenomena, **3**, 267-293 (2008).

100. S. Zhang, W. Ma and Y. Kuang: Necessary and sufficient conditions for global attractivity of Hopfield-type neural networks with time delays, Rocky Mountain J. Math., **38**, 1829-1840 (2008).

99. L. Min, T.-W. Y. Su and Y. Kuang: Mathematical Analysis of a basic virus infection model with application to HBV infection, Rocky Mountain J. Math., 38, 1573-1585 (2008).

98. S.-B. Hsu, T.-W. Hwang and Y. Kuang: Global dynamics of a predator-prey model with Hassell-Varley type functional response, Disc. Cont. Dyn. Sys., B, **10**, 857-871 (2008).

97. H. Wang, Y. Kuang and I. Loladze: A mechanistically derived stoichiometric producer-grazer model, J. Biological Dynamics, **2**, 286-296 (2008).

96. L. Min, W. Li, Y. Su and Y. Kuang: A mathematical model of the dynamics for anti-HBV infection treatment with Peginterferon Alfa-2a, Proceedings of the 2008 Int. Conference on Communication Circuit and Systems, 1433-1436 (2008).

95. Y. Kang, D. Armbruster and Y. Kuang: Dynamics of a plant-herbivore model, J. Biological Dynamics, **2**, 89-101 (2008).

94. H. Thieme, A. Tridane and Y. Kuang: An epidemic model with post-contact prophylaxis of distributed length. I. Thresholds for disease persistence and extinction, J. Biological Dynamics, **2**, 221-239 (2008).

93. V. Shi, A. Tridane and Y. Kuang: A viral load-based cellular automata approach to modeling HIV dynamics and drug treatment, J. of Theor. Biol., **253**, 24-35 (2008).

92. S. A. Gourley, Y. Kuang and J. D. Nagy: Dynamics of a delay differential model of hepatitis B virus infection, J. Biological Dynamics, **2**, 140-153 (2008).

91. H. Wang, H. Smith, Y. Kuang and J. J. Elser. Dynamics of stoichiometric bacteria-algae interaction in epilimnion, SIAM J. Appl. Math., **68**, 503-522 (2007).

90. H. Wang, J. Li and Y. Kuang: Mathematical modeling and qualitative analysis of insulin therapies, Math. Biosc., **210** (2007), 17-33.

89. Bingtuan Li and Y. Kuang. Heteroclinic bifurcation in the Michaelis-Menten type ratio-dependent predator-prey system, SIAM J. Appl. Math., **67**, 1453-1464 (2007).

88. R. Lopez, Y. Kuang and A. Tridane. A simple SI model with two age groups and its application to USA HIV epidemics: to treat or not to treat?, to appear in J. Biol. Syst., **15**, (2007) 169-184.

87. J. Li and Y. Kuang: Analysis of a model of the glucose-insulin regulatory system with two delays, SIAM J. Appl. Math., **67**, 757-776 (2007).

86. G. Sui, M. Fan, I. Loladze and Y. Kuang: The Dynamics of a Stoichiometric Plant-Herbivore Model and Its Discrete Analog, Math. Biosc. and Eng., **4**, 29-46 (2007).

85. H. Wang and Y. Kuang. Alternative models for cyclic lemming dynamics. Math. Biosc. and Eng., **4**, 85-99 (2007).

84. J. Zhang, M. Fan and Y. Kuang: Rabbits Killing Birds Revisited, Math. Biosci., **203**, 100-123 (2006).

83. A. Makroglou and Y. Kuang. Some analytical and numerical results for a nonlinear Volterra integro-differential equation with periodic solution modeling hematopoiesis, HERMIS Journal, **7**, 1-17 (2006).

82. J. Li, Y. Kuang and C. Mason: Modeling the glucose-insulin regulatory system and ultradian insulin secretory oscillations with two time delays, J. of Theor. Biol., 242, 722-735 (2006).

81. A. Makroglou, J. Li and Y. Kuang: Mathematical models and software tools for the glucose-insulin regulatory system and diabetes: an overview, Applied Numerical Mathematics, 56, 559-573 (2006).

80. T.-W. Hwang and Y. Kuang: Host extinction dynamics in a simple parasite-host interaction model, *Math. Biosc. and Eng.*, **2**, 743 751, (2005).

79. M. Fan, I. Loladze, Y. Kuang and J. J. Elser: Dynamics of a stoichiometric discrete producer-grazer model, (pdf482K), *J. Difference Equations and Applications,* **11**, 2005, 347364.

78. S. A. Gourley and Y. Kuang: Two Species Competition with High Dispersal: The Winning Strategy, *Math. Biosc. and Eng.*, **2**, 345-362 (2005).

77. M. Fan, Y. Kuang and Z. Feng: Cats Protecting Birds Revisited, *Bulletin of Mathematical Biology,* **67**, 1081-1106 (2005).

76. S. A. Gourley and Y. Kuang: A Delay Reaction-Diffusion Model of the Spread of Bacteriophage Infection, *SIAM J. Appl. Math.*, **65**, 50-566(2005).

75. Yang Kuang, Jef Huisman and James J. Elser: Stoichiometric plant-herbivore models and their interpretation, *Math. Biosc. and Eng.*, **1**, 215-222(2004).

74. S. A. Gourley and Y. Kuang: A Stage Structured Predator-Prey model and Its Dependence on Maturation Delay and Death Rate, *J. Math. Biol.*, **49**, 188-200 (2004).

73. M. Fan and Y. Kuang: Dynamics of nonautonomous predator prey system with the Beddington -DeAngelis functional response, *J. Math. Anal. Appl.*, **295**, 15-39(2004).

72. C. R. Miller, Y. Kuang, W. F. Fagan and J. J. Elser: Modeling and analysis of stoichiometric two-patch consumer-resource systems. *Mathematical Biosciences*, **189**, 153-184 (2004)

71. Y. Kuang, J. Nagy and J. Elser: Biological stoichiometry of tumor dynamics: mathematical models and analysis, *Disc. Cont. Dyn. Syst., series B*, **4**, 221-240. 2004.

70. I. Loladze, Y. Kuang, J. J. Elser and W. F. Fagan: Coexistence of two predators on one prey mediated by stoichiometry. *Theoretical Population Biology*, **65**, 1-15, 2004.

69. J. Elser, J. Nagy and Y. Kuang: Biological stoichiometry: an ecological perspective on tumor dynamics, *BioScience*, **53**(2003), 1112-1120.

68. S. A. Gourley and Y. Kuang: Wavefronts and global stability in a time-delayed population model with stage structure. R. Soc. Lond. *Proc. Ser. A Math. Phys. Eng. Sci.* **459** (2003), no. 2034, 1563-1579.

67. Y. Kuang, W. Fagan and I. Loladze: Biodiversity, habitat area, resource growth rate and interference competition, *Bulletin of Mathematical Biology,* **65**(2003), 497-518.

66. S.-B. Hsu, T.-W. Hwang and Y. Kuang: A Ratio-Dependent Food Chain Model and Its Applications to Biological Control, *Math. Biosc.*, **181**(2003), 55-83.

65. T.-W. Hwang and Y. Kuang: Deterministic extinction effect of parasites on host populations, *J. Math. Biol.*, **46**(2003), 17-30.

64. Y. Kuang: Basic properties of mathematical population models, *J. of Biomathematics*, **17** (2002), 129-142.

63. Y. Li and Y. Kuang: Periodic solutions in periodic state-dependent delay equations and population models, *Proc. of AMS.* **130**(2002), 1345-1353.

62. E. Beretta and Y. Kuang: Geometric stability switch criteria in delay differential systems with delay dependent parameters, *SIAM J. Math. Anal.*, **33** (2002), 1144-1165.

61. Y. Kuang: Global stability and persistence in diffusive food chains, (24 pages), *The ANZIAM journal* (formerly the J. Austral. Math. Soc. B.), **43**, (2001), 247-268.

60. S. B. Hsu, T. W. Hwang and Y. Kuang: Rich dynamics of a ratio-dependent one prey two predator model, *J. Math. Biol.* **43**(2001), 377-396.

59. Y. Li and Y. Kuang: Periodic solutions in periodic delayed Gause-type predator-prey systems, *Proceedings of Dynamical Systems and Applications* **3**(2001), 375-382.

58. S. B. Hsu, T. W. Hwang and Y. Kuang: Global analysis of the Michaelis-Menten type ratio-dependent predator-prey system, *J. Math. Biol.* **42**, 489-506(2001).

57. Y. Li and Y. Kuang: Periodic solutions in periodic delay Lotka-Volterra equations and systems, *J. Math. Anal. Appl.*, **255**, 260-280(2001).

56. J. Li, Yang Kuang and B. Li: Analyses of IVGTT glucose-insulin interaction models with time delay, *Discrete Contin. Dynam. Systems, B.* **1**, 103–124(2001).

55. E. Beretta and Y. Kuang: Modeling and analysis of a marine bacteriophage infection with latency period, *Nonlinear Analysis: Real World Applications*, **2**, 35-74(2001).

54. I. Loladze, Y. Kuang and J. Elser: Stoichiometry in producer-grazer systems: linking energy flow and element cycling, *Bull. Math. Biol.*, **62**, 1137-1162(2000).

53. E. Beretta and Y. Kuang: Global stability in a well known delayed chemostat model, *Communications in Applied Analysis*, **4**, 147–155(2000).

52. B. Li, G. S. K. Wolkowicz and Y. Kuang: Global asymptotic behavior of a chemostat model with two perfectly complementary resources and distributed delay, *SIAM J. Appl. Math.*, **60**, 2058-2086(2000).

51. B. Li and Y. Kuang: Simple food chain in a chemostat with distinct removal rates, J. Math. Anal. Appl., 242, 75-92(2000). (pdf 160k)

50. W. Li, F. Szidarovszky and Y. Kuang: Notes on the stability of dynamic economic systems, *Appl. Math. & Computation*, **108**, 85–89(2000).

49. B. Li, Y. Kuang and H. Smith: Competition between plasmid-bearing and plasmid-free microorganisms in a chemostat with distinct removal rates, *Canadian Applied Math. Quarterly*, **7**, 251-281(1999).

48. Y. Kuang: Rich Dynamics of Gause-type ratio-dependent predator-prey systems, in Differential equations with applications to biology, Ruan et al. ed. *Fields Institute Communications*, **21**, 325–337(1999).

47. K. Cooke, Y. Kuang and Bingtuan Li: Analysis of an antiviral immune response model with time delays, Proceedings of the third Butler conference, *Canadian Applied Math. Quarterly* , **6,** 321–354(1998).

46. Y. Kuang and E. Beretta: Modeling and analysis of a marine bacteriophage infection. *Math. Biosc.* **149**, 57–76(1998).

45. Y. Kuang and E. Beretta: Global qualitative analysis of a ratio-dependent predator-prey system, *J. Math. Biol.* **36**, 389–406(1998).

44. E. Beretta and Y. Kuang: Global analyses in some delayed ratio-dependent predator-prey systems, *Nonlinear Analysis, T.M.A.*, **32**, 381–408(1998).

43. Bingtuan Li and Y. Kuang: Sharp conditions for oscillations in some nonlinear nonautonomous delay differential equations, *Nonlinear Analysis, T.M.A.* , **29**, 1265– 1276(1997).

42. B. R. Tang and Kuang: Existence and uniqueness of periodic solutions of periodic functional differential systems, *Tohoku Mathematical Journal*, **49**, 621–643(1997).

41. T. Zhao, Y. Kuang and H.L. Smith: Global existence of periodic solutions in a class of delayed Gause-type predator-prey systems, *Nonlinear Analysis, TMA*, **28**, 1373–1394(1997).

40. E. Beretta and Y. Kuang: Convergence results in a well known delayed predator-prey system, *J. Math. Anal. Appl.*, **204**, 840–853(1996).

39. Y. Kuang and J. M. Cushing: Global stability in a nonlinear difference-delay equation model of flour beetle population growth, *J. Difference Equations and Applications*, **2**, 31–37(1996).

38. Y. Kuang: 3/2 stability results for nonautonomous state-dependent delay differential equations, in *Differential Equations and Applications to Biology and Industry*, Proc. of Busenberg DE conf., Martelli et al. ed., 261–270, World Scientific, 1996.

37. Y. Kuang: Global stability in delayed nonautonomous Lotka-Volterra type systems without saturated equilibria, *Differential and Integral Equations*, **9**, 557– 567(1996).

36. B. R. Tang and Y. Kuang: Permanence in Kolmogorov-type systems of nonautonomous functional differential equations, *J. Math. Anal. Appl.*, **197**, 427- 447(1996).

35. Y. Kuang and J. W.-H. So: Analysis of a delayed two-stage population model with space-limited recruitment, *SIAM J. Appl. Math.*, **55**, 1675–1696(1995).

34. Y. Kuang: Global stability in delay differential systems without dominating instantaneous negative feedbacks. *J. Diff. Eqns.*, **119**, 503–532(1995).

33. H. I. Freedman and Y. Kuang: Some global qualitative analysis of a single species neutral delay differential population model, *Rocky Mount. J. Math.*, **25**, 201–215(1995).

32. Y. Kuang: Nonoccurrence of stability switching in systems of differential equations with distributed delays, *Quart. Appl. Math.*, **LII**, 569–578(1994).

31. Y. Kuang and Y. Takeuchi: Predator-prey dynamics in models of prey dispersal in two patch environments, *Math. Biosci.*, **120**, 77-98(1994).

30. Y. Kuang and B. R. Tang: Uniform persistence in nonautonomous delay differential Kolmogorov-type population models, R*ocky Mountain J. Math.*, **24**, 1–22(1994).

29. B. R. Tang, Y. Kuang and H. L. Smith: Strictly nonautonomous cooperative system with a first integral, *SIAM J. Math. Anal.*, **24**, 1331–1339(1993).

28. Y. Kuang and H. L. Smith: Global stability for infinite delay Lotka-Volterra type systems, *J. Differential Equations*, **103**, 221–246(1993).

27. Y. Kuang and H. L. Smith: Convergence in Lotka-Volterra type delay systems without instantaneous feedbacks, *Proc. Roy. Soc. Edinburgh,* **123A**, 45–58(1993).

26. Y. Kuang and H. L. Smith: Convergence in Lotka-Volterra type diffusive delay systems without dominating instantaneous negative feedbacks, *J. Austral. Math. Soc. Ser. B.* **34**, 471–493(1993).

25. Y. Kuang: Global stability in one or two species neutral delay population models, *Canad. Appl. Math. Quart.*, **1**, 23–45(1993).

24. Y. Kuang and H. L. Smith: Slowly oscillating periodic solutions of autonomous state-dependent delay equations, *Nonlinear Analysis, T.M.A.*, **19**, 855–872(1992).

23. Y. Kuang: Global attractivity and periodic solutions in delay differential equations related to models of physiology and population biology, *Japan Journal of Industrial and Applied Mathematics.*, **9**, 205–238(1992).

22. J. R. Haddock and Y. Kuang: Asymptotic theory for a class of nonautonomous delay differential equations, *J. Math. Anal. Appl.*, **168**, 147–162 (1992).

21. H. L. Smith and Y. Kuang: Periodic solutions of delay differential equations of threshold-type delay, in: *Oscillation and Dynamics in Delay Equations*, Graef and Hale ed. 153–176, Contemporary Mathematics 129, AMS, Providence, 1992.

20. Y. Kuang: Qualitative analysis of one or two species neutral delay population models, *SIAM J. Math Anal.*, **23**, 181–200 (1992).

19. Y. Kuang, B. G. Zhang and T. Zhao: Qualitative analysis of a nonautonomous nonlinear delay-differential equation, *Tohoku Math. J.,* **43**, 509–528 (1991).

18. Y. Kuang: Global stability for a class of nonlinear nonautonomous delay equations, *Nonlinear Analysis, T.M.A.*, **17**, 627-634 (1991).

17. Y. Kuang: Boundedness of solutions in neutral delay predator-prey and competition systems, in: *Differential Equations Models in Biology, Epidemiology and Ecology*, S. Busenberg and M. Martelli ed, 210–218(1991)(Lecture Notes in Biomathematics 92, Springer-Verlag).

16. Y. Kuang, R. H. Martin and H. L. Smith: Global stability for infinite delay, dispersive Lotka-Volterra systems: weakly interacting populations in nearly identical patches, *Journal of Dynamics and Differential Equations*, **3**, 339-360 (1991).

15. Y. Kuang: On neutral delay logistic Gause-type predator-prey systems, Dynamics and Stability of Systems, 6, 173-189 (1991).

14. H. I. Freedman and Y. Kuang: Stability switches in linear scalar neutral delay equations, *Funkcialaj Ekvacioj*, **34**, 187-209 (1991).

13. Y. Kuang and A. Feldstein: Boundedness of solutions of a nonlinear nonautonomous neutral delay equation, *J. Math. Anal. Appl.*, **156**, 193-204 (1991).

12. Y. Kuang and H. L. Smith: Global stability in diffusive delay Lotka-Volterra systems, *Differential and Integral Equations*, **4**, 117-128 (1991).

11. Y. Kuang: On neutral-delay two-species Lotka-Volterra competitive systems, *J. Austral. Math. Soc. Ser. B*, **32**, 311-326 (1991).

10. Y. Kuang and A. Feldstein: Monotonic and oscillatory solutions of a linear neutral delay equation with infinite lag, *SIAM J. Math. Anal.*, **21**, 1633-1641 (1990).

9. H. I. Freedman and Y. Kuang: Uniqueness of limit cycles in Lienard type equations, *Nonlinear Analysis,T.M.A.*, **15**, 333-338 (1990).

8. Y. Kuang: Global stability of Gause-type predator-prey systems, *J. Math. Biol.*, **28**, 463-474 (1990).

7. Y. Kuang: Finiteness of limit cycles in planar autonomous systems, *Appl. Anal.*, **32**, 253-264 (1989).

6. Y. Kuang: Limit cycles in a chemostat-related model, *SIAM J. Appl. Math.*, **49**, 1759-1767 (1989).

5. Y. Kuang: On the location and period of limit cycles in Gause-type predator-prey systems, *J. Math. Anal. Appl.*, **142**, 130-143 (1989).

4. Y. Kuang: Nonuniqueness of limit cycles of Gause-type predator-prey systems, Appl. Anal. 29, 269-287 (1988).

3. Y. Kuang and H. I. Freedman: Uniqueness of limit cycles in Gause-type Models of predator-prey systems, *Math. Biosci.*, **88**, 67-84 (1988).

2. Y. Kuang and C. McDiarmid: On the bandwidth of random graphs, *Ars Combinatoria*, **20-A**, 29-36 (1985).

1. Y. Kuang: Another method of the "chip-test" of the associative law of finite group, *J. of U. of Sci. & Tech. of China*, May, 174-178 (1983) (in Chinese).

BOOK REVIEWS:

1. Book review in *J. of Difference Equations and Applications*, 561-562, **5**(1999).

2. Book review for Method of Variation of Parameters for Dynamic Systems, by V. Lakshmikantham and S. G. Deo, *SIAM Review*, **42**, 753(2000)

3. Book review for Dynamical Systems and Their Applications in Biology edited by Shigui Ruan, Gail S.K. Wolkowicz, and Jianhong Wu. *SIAM REVIEW*, 174-175, **46**(2004).

CONFERENCES BEFORE 2004:

1. Tenth British Combinatorial Conference, Glasgow, July, 1985.

2. The Fourth IMA Conference on Mathematical Theory of the Dynamics of Biological Systems, Oxford, July, 1986.

3. The XI International Conference on Nonlinear Oscillations, Budapest, August, 1987.

4. Special Sessions: Applications of Differential Equations to Population Ecology, Joint Mathematical Meetings of AMS and AMA, Atlanta, Jan. 1988 (Invited Speaker).

5. Geoffrey J. Butler Memorial Conference in differential Equations and Mathematical Biology, Edmonton, June, 1988.

6. Joint Mathematics Meetings of AMS and AMA, Phoenix, Jan. 11-14, 1989.

7. The Ninth Annual Southeastern-Atlantic Regional Conference on Differential Equations, University of North Carolina at Charlotte, Oct. 13-14, 1989(supported by the conference).

8. International Conference on Differential Equations and Applications to Biology and Population Dynamics, Claremont, California, Jan. 10-13, 1990.

9. SIAM Conference on Dynamical Systems, Orlando, Florida, May 7-10, 1990.

10. The International Conference on the Numerical Solution of Volterra and Delay Equations, Tempe, Arizona (ASU), May 25-28, 1990 (Invited Speaker).

11. Minisymposium "Delay Differential Equations in Population Dynamics", in the Second International Conference on Industrial and Applied Mathematics, Washington,D.C., July 8-12, 1991 (Minisymposium Organizer and Speaker).

12. Midwest Dynamical Systems Conference at Montana State University, Oct. 11-13, 1991(supported by the conference).

13. 20th Meeting, The Midwest Conference on Differential Equations, The University of Iowa, Dec. 6-7, 1991.

14. The Second Geoffrey J. Butler Memorial Conference on differential Equations and Mathematical Biology, Edmonton, June 17-20, 1992 (invited speaker).

15. Annual Meeting of Canadian Applied Math. Soc., North York, Ontario, May 30, June 2, 1993 (invited speaker)

16. International Conference on Differential Equations and Applications to Biology and Industry, Claremont, California, June 1-4, 1994 (invited half-hour speaker).

17. Summer Seminar on ODE and FDE 1995, Karuizawa, Japan, July 30-Aug. 1, 1995(invited main speaker, supported by the conference).

18. Mathematical Models in Population Dynamics, Logan, Utah, Aug. 17-19, 1995(invited contributing speaker, supported by the conference).

19. Volterra Centennial, Tempe, Arizona (ASU), May 27-30, 1996 (minisymposium organizer).

20. Mathematical Theory of Networks and Systems, St. Louis, Missouri, June 24-28, 1996(invited speaker in special session).

21. An International Conference on Differential Equations with Applications to Biology, Dalhousie University, Halifax, Nova Scotia, Canada, July 25-29, 1997. (invited speaker).

22. AMS regional conference, special session on mathematical biology, Nov. 13-15, 1998, Tucson.(invited)

23. Third international conference on dynamics and applications, May 26-29, 1999, Atlanta,(invited)

24. Pacific Rim Dynamical System Conference, Lahaina, Maui, Hawaii, Aug. 9-13, 2000, (invited minisymposium speaker and organizer)

25. The second annual genes to ecosystems project meeting, Lake Itasca, University of Minnesota Biological Station, MN Jan. 7-10,2001. (invited speaker)

26. Sixth SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 20-24, 2001. (minisymposium organizer)

27. The third annual genes to ecosystems project meeting, Kingston, Oklahoma (Lake Texhoma), University of Oklahoma Biological Station, Jan. 9-13, 2002.(invited speaker)

28. Workshop on Mathematical Models in Cancer, May 3-5, 2002, U. of Vanderbilt.

29. Annual meeting of the American Society of Integrative and Comparative Biology, Toronto, Jan. 5-9, 2003 (invited speaker)

30. The fourth annual genes to ecosystems project meeting, Guaymas, Mexico, March 16-21, 2003.(invited speaker)

31. The Fourth Geoffrey J. Butler Memorial Conference, June 17 - 21, 2003. University of Alberta, Edmonton, Alberta, Canada. (invited main speaker) Stoichiometry and biodiversity.

32. AMS regional meeting, Oct. 4-6, 2003, Boulder, CO. Invited Special session speaker.