

AUBURN
AUTHOR AWARDS

TUESDAY, APRIL 7, 2015



AUBURN

UNIVERSITY

2015 Auburn Author Awards

P R O G R A M



Welcome

Graduate School Dean George Flowers
Dean of Libraries Bonnie MacEwan

Presentation of Auburn Author Awards

Graduate School Dean George Flowers
Graduate School Associate Dean George Crandell

Reception

The publication of a book-length scholarly work is a significant milestone in an academic career, and we are pleased to honor the faculty represented here.

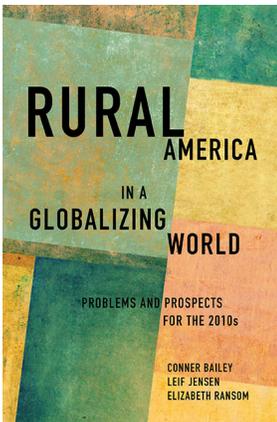
The Graduate School wishes to extend special thanks to Ted Becker, Alma Holladay Professor of Civic Engagement in the Department of Political Science. Thanks to Dr. Becker's advocacy on behalf of graduate faculty, the Auburn Author Awards program — after a hiatus of several years — was resumed in 2011.

SPONSORED BY:

AUBURN UNIVERSITY GRADUATE SCHOOL
AUBURN UNIVERSITY LIBRARIES



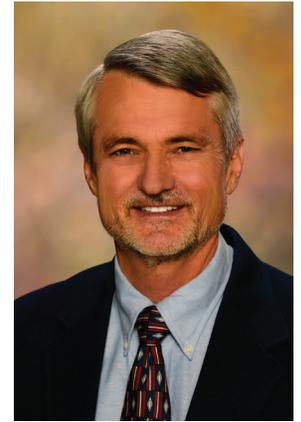
Conner Bailey is a professor in the Department of Agricultural Economics & Rural Sociology. He received his Ph.D. from Cornell University in 1980. Prior to joining the Auburn faculty in 1985, he held research positions at the International Center for Living Aquatic Resources Management and in the Marine Policy Center at Woods Hole Oceanographic Institution. Conner's research interests have included a range of natural resource and environmental issues (tropical fisheries management, hazardous waste management, environmental justice, forestry, coastal restoration, aquaculture), the social impacts of technological change (powerful fishing gear, genetic engineering), and issues of race and poverty in the South. He served as an Adjunct Professor in the Norwegian College of Fisheries at the University of Tromsø (1998-2002) and since 2009 has served as Adjunct Professor of Forestry & Wildlife Sciences at Auburn. He has lived and worked in Southeast Asia over 10 years and found much of what he learned there helpful in understanding social dynamics in Alabama. Bailey's work also has taken him to work in Brazil and Newfoundland, Canada. He has served on a variety of science advisory panels on fisheries and coastal zone management. In 2007, he received the Outstanding Research Award from the Rural Sociological Society, a national organization he later served as President. He has served in a number of positions involving shared governance at Auburn University, including Chair of the University Faculty and Senate, and President of the Auburn Chapter of the American Association of University Professors (AAUP). In 2013, he was one of two recipients of Auburn's Creative Research and Scholarship Award.



Rural America in a Globalizing World: Problems and Prospects for the 2010s

Every ten years, the Rural Sociological Society takes stock of conditions in rural North America and how scholars in the RSS have contributed to understanding challenges and opportunities facing the tens of millions of people living in small towns and rural areas. In this 734 page volume, 89 authors contributed 42 chapters that fell under five broad thematic areas: the structure of agriculture; natural resources and the environment; race and ethnicity; demographic transitions; and rural economies, community, and quality of life. Each section was introduced by a senior scholar in the field reviewing that particular substantive area to identify important gaps in the literature that researchers in the future should address. The fourth of a series of decennial volumes, *Rural America in a Globalizing World* was published by West Virginia University Press, home to the Rural Studies Series of the RSS. The volume was edited by Conner Bailey (Auburn), Leif Jensen (Penn State), and Elizabeth Ransom (University of Richmond).

Robert S. Boyd is Professor of Biology and Undergraduate Program Officer in the Department of Biological Sciences at Auburn University. A graduate of California State Polytechnic University, Pomona (B.S. and M.S.) and the University of California at Davis (Ph.D.), he came to Auburn in the Fall of 1988 as Assistant Professor in the Department of Botany and Microbiology. He served as Coordinator of Auburn's freshman biology program for 5 years and became the Undergraduate Program Officer for the Department of Biological Sciences in 2013. Boyd has received a number of awards: two Alumni Undergraduate Teaching Excellence Awards (1998-1999, 2012), the COSAM Dean's Award for Outstanding Teaching (1999), the COSAM Outstanding Faculty Advising Award (2009), an Outstanding Graduate Mentor Award (2010), and he was Learning Community Coordinator of the Year in 2010.

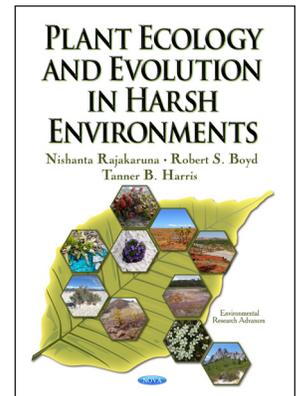


Boyd's research interests include the ecology and management of rare and endangered plants, as well as the ecology and evolution of metal hyperaccumulator plants (plants that take unusually large amounts of some metals into their tissues). He has published over 100 journal articles and book chapters, and has served on Editorial Boards of three scientific journals and as Guest Editor for two others. Boyd is a leader among scientists studying the ecology of serpentine soils and has been involved in the organization of 5 international conferences on this topic. In 2000, he was honored by the naming of an insect species, *Melanotrichus boydi*, which was discovered by Boyd and his students during research on serpentine sites in California. He previously was recognized as an Auburn Author for the 2004 co-edited book *Ultramafic Rocks: Their Soils, Vegetation and Fauna* produced after an international conference held in 2003 in Havana, Cuba.

Plant Ecology and Evolution in Harsh Environments

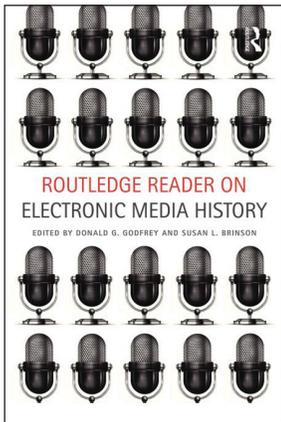
Harsh environments found around the world harbor unique organisms adapted to extreme features of climate, soil, and other environmental variables. The adaptations demonstrated by organisms found in such environments shed light on basic and applied aspects of ecology and evolution. This volume brings together current research on plants, fungi and microbes from harsh environments to reveal underlying patterns and common themes of these especially challenging habitats. Habitats discussed in the book include alpine and arctic settings, fire-prone Mediterranean climates, serpentine outcrops, gypsum soils, metal-rich mine tailings, and saline soils.

The 16 chapters in this book, produced by teams of authors from 8 countries, summarize current research but also highlight new tools and emerging techniques that are being used to develop our understanding of evolution in harsh environments. In addition to discussing basic research, the chapters include applied work focusing on the threats posed by climate change and other anthropogenic impacts as well as efforts to restore and protect extreme habitats and the unique organisms they harbor. The work highlighted in this volume demonstrates what these species and their environments have taught us about ecological and evolutionary theory, conservation, and restoration: knowledge that can be applied well beyond the habitats and species included in this book.



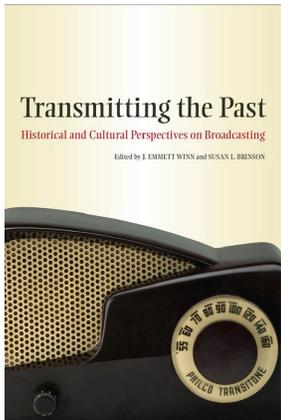


Susan Brinson received her doctorate from the University of Missouri-Columbia in 1990. Her research focuses on two areas of broadcasting history: the history of the Federal Communications Commission between 1940-1960, and the history of women in television between 1940-1960.



Routledge Reader on Electronic Media History

Electronic media history is steadily assuming a central role in the study of mass communications, radio, television popular culture, journalism, and the new electronic media platforms. This collection of research essays from the major publications in the electronic media discipline illustrates the growth and development of electronic media research from its earliest appearance to current day. Representing a wide variety of topics and scholarship, the articles included here demonstrate landmark research in the field, and illustrate varied methodological approaches to historiography. This book provides essays from a variety of authors and diverse methodological approaches within electronic media historiography as applied to a spectrum of topics. It illustrates the strong tradition of media history and the evolution of both topics and methods. This “Reader” reflects not just what has been covered, but how coverage has changed in the evolution of research. It illustrates the foundations of the field as well as the continuing need for research.



Transmitting the Past: Historical and Cultural Perspectives on Broadcasting

The essays included in this anthology represent some of the best cultural studies historical research on broadcasting in the U. S. currently underway. Each one concentrates on a particular event in broadcast history - beginning with Marconi’s introduction of wireless technology in 1899. Michael Brown examines newspaper reporting in America of Marconi’s belief in Martians, stories that effectively rendered Marconi inconsequential to the further development of radio. The widespread installation of radios in automobiles in the 1950s, Matthew Killmeier argues, paralleled the development of television and ubiquitous middle-class suburbia in America. Heather Hundley analyzes depictions of male and female promiscuity as presented in the sitcom Cheers at a time concurrent with media coverage of the AIDS crisis. Fritz Messere examines the Federal Radio Act of 1927 and the clash of competing ideas about what role radio should play in American life. Chad Dell recounts the high-brow programming strategy NBC adopted in 1945 to distinguish itself from other networks. And George Plasketes studies the critical reactions to Cop Rock, an ill-fated combination of police drama and musical, as an example of society’s resistance to genre-mixing or departures from formulaic programming. The result is a collection that represents some of the most recent and innovative scholarship, cultural and historical, on the intersection between the medium of broadcasting and American cultural, political, and economic life.

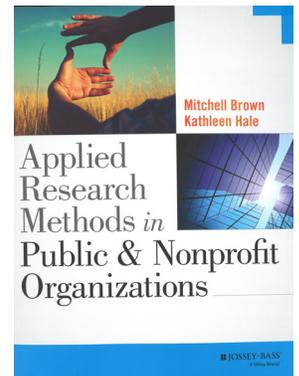
Mitchell Brown, PhD, is an Associate Professor and Internship Director for the Master of Public Administration (MPA) Program in the Department of Political Science at Auburn University. Her research agenda focuses on the empowerment of marginalized communities, which she primarily pursues through applied research. Her course offerings range from research methods and program evaluation to American government and public policy. She has served on the board of the Alabama Department of Child Abuse and Neglect Prevention since 2012. From 2006-2009, Mitchell served as co-Principal Investigator of the evaluation of the Rural Domestic Violence and Child Victimization Enforcement Grant Program Special Initiative: Faith-based and Community Organization Pilot Program, a program of the Office of Violence Against Women at the Department of Justice. She is the recipient of the 2013 SGA Outstanding Faculty Award for the College of Liberal Arts at Auburn University, the 2009 Distinguished Diversity Researcher Award through the Research Initiative for the Study of Diversity and the Office of the Vice President for Research at Auburn University, and an Outstanding Service Award in 1998 from the Center for Mental Health Services, Substance Abuse and Mental Health Service Administration, Department of Health and Human Services, among others.



Applied Research Methods in Public and Nonprofit Organizations

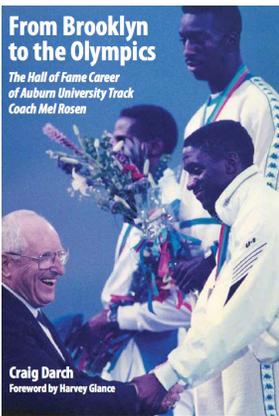
Applied Research Methods in Public and Nonprofit Organizations (Wiley/Jossey-Bass 2014) takes an integrative approach to applied research, emphasizing design, data collection, and analysis. The authors utilize their original research to construct common case studies about applied research issues across a range of public administration and public policy subfields. Chapters illustrate the everyday nature of research, and include forms and formats for data collection and analysis, plus writing excerpts that demonstrate results reporting and presentation. The authors' own data sets are used throughout the book and are available for use online.

Conducting research, analyzing results, and synthesizing the findings for key stakeholders are fundamental to the study and practice of public and nonprofit management. Aligned with management curriculum for both sectors, *Applied Research Methods in Public and Nonprofit Organizations* focuses on the common ground these organizations share when it comes to planning, conducting, and using research in day-to-day professional activities. The original research examples presented are in the context of this shared commonality, including resource acquisition, evaluative processes, and future planning through the lens of common social policy issues facing leaders today. Topics include the research process and applied research designs; applied research questions and literature; data collection in the field and survey research; and data analysis, writing, and presentation.





Craig Darch is the Humana-Sherman-Germany Distinguished Professor of Special Education at Auburn University. He earned his doctorate at the University of Oregon and has taught at Auburn for 32 years. While the Rosen book is his first biography, he has co-authored three college-level textbooks on learning and intellectual disabilities and has published more than 60 research articles for professional journals in the fields of special education and psychology. He has contributed chapters to three edited books and has written articles on special education for three encyclopedias.



From Brooklyn to the Olympics: The Hall of Fame Career of Auburn University Track Coach Mel Rosen

The Rosen biography follows Coach Mel Rosen's life from the streets of Brooklyn during the 1930s and 40s to his selection as head United States track and field coach for the 1992 Summer Olympics in Barcelona. The Rosen story describes how a Jewish kid from Brighton Beach, New York, was able to follow his dream to become the track and field coach at Auburn University, a position he held for 28 years. Rosen's achievements as head track coach were extraordinary. He coached seven Olympians, 143 All Americans, and guided Auburn's track and field team to four consecutive SEC Conference indoor championships. The pinnacle of his career was coaching the U.S. Olympic track and field team to a record 20 medals in Barcelona. As a result of his impressive record of achievements, Rosen was recognized by many track and field organizations once he retired from coaching in 1992. He was inducted into the Alabama Sports Hall of Fame (1993), the U.S. Track and Field Hall of Fame (1995), and the International Jewish Sports Hall of Fame (1994). Auburn University honored Rosen in 2006 by naming its new track the Hutsell-Rosen Track.

Sydney Freeman, Jr. is an Educational Theorist, Social Scientist & Educational Administrator, and President and Chief Research Scientist at Preeminent Leadership & Research Solutions, LLC. He earned his undergraduate degree at Oakwood University and went on to attend Auburn University, where he earned a master's and Ph.D. in Higher Education Administration by the age of 26 years old. He has also completed a graduate certificate in College and University Teaching at Auburn University and earned the designation of Certified Faculty Developer (CFD) through the Learning Education Resource Network (LERN). Dr. Freeman served as the Director of the Teaching and Learning Center in the College of Veterinary Medicine, Nursing, and Allied Health at Tuskegee University and presently serves as an Adjunct Professor in Auburn University's Higher Education Graduate Program. He is the co-chair of the Association for the Study of Higher Education's Ad Hoc committee on Doctoral Guidelines. Dr. Freeman recently completed his first co-edited book titled "Advancing Higher Education as a Field of Study" with Stylus Publishing last year. He also was recently named to the Board of Directors of the American Association of University Administrators.



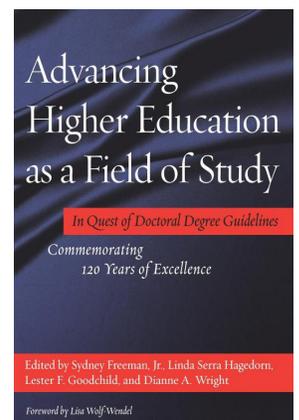
Advancing Higher Education as a Field of Study: In Quest of Doctoral Degree Guidelines - Commemorating 120 Years of Excellence

Where is higher education as a field of study going in this century? How will higher education program leaders design and sustain their degree programs' vitality in the face of perennial challenges from inside and outside the academy?

While in 1979 the Council for the Advancement of Standards in Higher Education (CAS) defined standards for student affairs master's level preparation, and while 2010 saw the adoption of guidelines for higher education administration and leadership preparation programs at the master's degree level, there still are, however, no guidelines that address higher education leadership doctoral programs, despite increasing demands for assessment and evaluation.

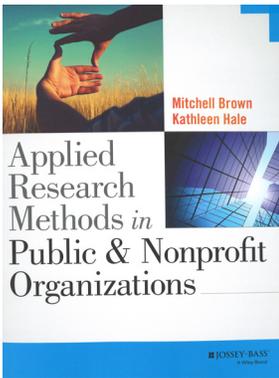
This book suggests that higher education administration doctoral degree guidelines are a critical next step in advancing their program quality and continuity. It offers a review of the field's history, the condition of its higher education programs, developments from the student affairs specialization and its guidelines, and a multi-chapter dialogue on the benefits or disadvantages of having guidelines.

At a time of urgency to prepare the next generation of higher education faculty and leaders, this book sets out the parameters for the debate about what the guidelines should cover to ensure the appropriate and effective preparation of students. It also offers a useful framework for enriching the knowledge of deans, chairs, program coordinators and faculty who are engaged in program design, assessment, and revision. It will also be of interest to policymakers, the personnel of accrediting agencies, and not least graduate students within higher education preparation programs.





Kathleen Hale, J.D., Ph.D., is Director of the Master of Public Administration (MPA) Program and Associate Professor in the Department of Political Science at Auburn University, where she also directs graduate certificates in Election Administration and Non-profit Organizations and Community Governance. Her research focuses on public sector networks and intergovernmental relationships and applied questions related to innovation, policy change, and the effectiveness of public service initiatives. She was named College of Liberal Arts Engaged Scholar for her work engaging students in research with communities and with national professional associations. Her book, *How Information Matters: Networks and Public Policy Innovation* (Georgetown University Press, 2011), was named Best Book by the Academy of Management Public and Nonprofit Section (2012). She is active in professional associations that address curricular issues in the field including the American Political Science Association Organized Section on Federalism and Intergovernmental Relations (Executive Council Chair) NASPAA's Nonprofit Section (Executive Council Chair) and ARNOVA's Teaching Section. She also serves on the board of directors for the Election Center and the Alabama Association of Nonprofits. At Auburn, she teaches courses in intergovernmental relations, election administration, qualitative methods, and public administration issues.



Applied Research Methods in Public and Nonprofit Organizations

Applied Research Methods in Public and Nonprofit Organizations (Wiley/Jossey-Bass 2014) takes an integrative approach to applied research, emphasizing design, data collection, and analysis. The authors utilize their original research to construct common case studies about applied research issues across a range of public administration and public policy subfields. Chapters illustrate the everyday nature of research, and include forms and formats for data collection and analysis, plus writing excerpts that demonstrate results reporting and presentation. The authors' own data sets are used throughout the book and are available for use online.

Conducting research, analyzing results, and synthesizing the findings for key stakeholders are fundamental to the study and practice of public and nonprofit management. Aligned with management curriculum for both sectors, *Applied Research Methods in Public and Nonprofit Organizations* focuses on the common ground these organizations share when it comes to planning, conducting, and using research in day-to-day professional activities. The original research examples presented are in the context of this shared commonality, including resource acquisition, evaluative processes, and future planning through the lens of common social policy issues facing leaders today. Topics include the research process and applied research designs; applied research questions and literature; data collection in the field and survey research; and data analysis, writing, and presentation.

Matthew Hoch is Assistant Professor of Voice at Auburn University, where he teaches applied voice, diction, and opera workshop. Prior to this position, he spent six years as Assistant Professor of Voice at Shorter College, where he taught applied voice, vocal literature, and served as Coordinator of Vocal Studies. Dr. Hoch's students have gone on to successful careers in both classical and musical theatre genres and have won awards from the Metropolitan Opera National Council (MONC), NATS, MTNA, ACTF, and others. He has appeared as an oratorio soloist throughout the United States and as a soloist with many professional ensembles, including the Oregon Bach Festival, the Santa Fe Desert Chorale, the Vox Consort, the Hartford, Rome, and Nashua Symphony Orchestras, and the Atlanta Baroque Orchestra. He also has had considerable experience as a professional chorister, performing with all-professional ensembles such as the Spoleto Festival Choir (Italy), Conspirare, and the Carnegie Hall Choral Workshops.

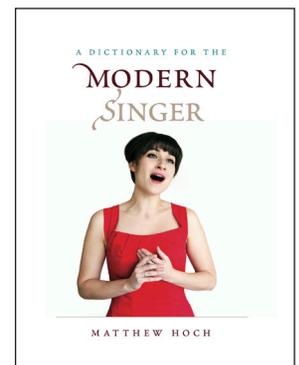


Dr. Hoch's first book, *A Dictionary for the Modern Singer*, was released by Rowman & Littlefield in 2014. Forthcoming books include *Welcome to Church Music and the Hymnal 1982* (Morehouse, 2015) and *Oratorio: A Singer's Guide* (Rowman & Littlefield, 2016). Recent articles have appeared in the *Journal of Singing*, *Opera Journal*, and *Journal of the Association of Anglican Musicians*. Since 2008, he has served as Editor-in-Chief of *VOICEPrints: The Official Journal of NYSTA*. Dr. Hoch has presented his research at many national and international conferences, including the International Congress of Voice Teachers (ICVT), National Association of Teachers of Singing (NATS), College Music Society (CMS), Hawaii International Conference on Arts and Humanities (HICAH), and the Voice Foundation Symposium. He is a "double alumnus" of the NATS Intern Program, completing the program as an intern in 2006 and hosting the program at Shorter College in 2009. In 2013, he was selected as a Master Teacher for NYSTA's Comparative Pedagogy Weekend at Columbia University. He has completed all three levels of Somatic Voicework™ certification with Jeannette LoVetri.

Dr. Hoch earned his BM degree from Ithaca College with a triple major in vocal performance, music education, and music theory; his MM degree from The Hartt School with a double major in vocal performance and music history; and his DMA in vocal performance from the New England Conservatory. In addition to his academic life, he serves as Choirmaster and Minister of Music at Holy Trinity Episcopal Church in Auburn, Alabama, where he lives with his wife, Theresa, and three children: Hannah, Sofie, and Zachary.

A Dictionary for the Modern Singer

A Dictionary for the Modern Singer is a guide for students of singing, vocal pedagogues, and lovers of the art of singing. It is part of the "Dictionaries for the Modern Musician" series, reference works intended to offer both the novice and the advanced artist key information designed to convey the field of study and performance for a major instrument or instrument class, as well as the workings of musicians in areas from conducting to composing. In addition to classical singing, *A Dictionary for the Modern Singer* also addresses musical theatre, popular, and global styles. With an emphasis on contemporary practice, this work includes terms and figures that influenced modern singing styles. Topics include vocal pedagogy, voice science, vocal health, styles, genres, performers, diction, and other relevant topics. The dictionary also helps students more fully understand the concepts articulated by their teachers. An extensive bibliography is included for students seeking to explore a particular subject in greater depth. Illustrations and charts further illuminate particular concepts. Twelve appendices are included, and five additional essays address stage fright, practicing, repertoire selection, audio technology, and an introduction to exploring non-classical styles.





Marie Kraska is a Mildred Cheshire Fraley Distinguished Professor in the Department of Educational Foundations, Leadership, and Technology in the College of Education. She holds a Ph.D. in technical education studies, with emphasis in research and statistics from the University of Missouri-Columbia, a Master's degree in Probability and Statistics from Auburn University and a Master of Science degree in research, statistics and measurement from the University of Wisconsin-Stout. In addition to her teaching responsibilities, Dr. Kraska is the Director of Research for the Center for Disability Research and Service, within the Department of Special Education, Rehabilitation, and Counseling. Her research evolves from serving students across the campus as a methodologist and statistician on doctoral committees. Her research interests are in applications of statistical procedures to theoretical concepts and modeling latent variables related to values, student retention, attitudes toward special populations, and rehabilitation services and clients. She teaches all applied research and statistics courses within the Department, such as multivariate analysis, nonparametric statistics, and structural equation modeling.

By invitation, Dr. Kraska published three full-length articles in the *Encyclopedia of Research Design* and three full-length articles in the *Encyclopedia of Educational Psychology*. In addition, she has published numerous articles in national and international refereed journals such as the *Journal of Research and Development in Education*; *Educational and Psychological Measurement*; *Community/Junior College Quarterly of Research and Practice*; and *Journal of Studies in Higher Education*.

She received the Undergraduate Teaching Excellence Award from the Auburn Alumni Association in 1998 and the Distinguished Alumni Award from the University of Wisconsin-Stout in 2000. She is a member of the Auburn University chapter of Phi Kappa Phi.

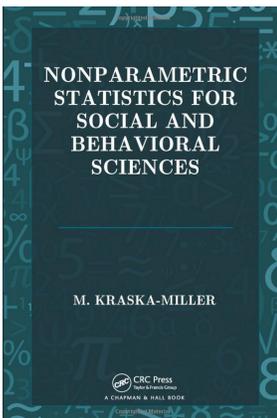
In addition to her most recent book, "Nonparametric Statistics for Social and Behavioral Sciences," (2014) published by CRC Press/Taylor & Francis. She has co-authored two books (with Dr. W. R. Miller) on teacher education: *Instructors and their Jobs* (4th ed.) 2009, and *Essential Teaching Skills* (2014), both published by American Technical Publishers.

Nonparametric Statistics for Social and Behavioral Sciences

High speed computers and advanced statistical software make data analysis available and accessible for those who need or desire to conduct research. *Nonparametric Statistics for Social and Behavioral Sciences* was developed for professionals who apply statistical analyses to make data-driven, evidence-based decisions. A key feature of the book is the hands-on pedagogical approach in presenting concepts, principles, and methods used in performing many nonparametric statistical procedures.

Statistical procedures are presented within a conceptual framework with relevant research problems and associated questions and hypotheses to be tested. Statistical formulas, explanations, and examples are given throughout the text as needed for each procedure. Demonstrations are included to show practical applications of many nonparametric procedures using IBM SPSS software.

In addition to the many statistical procedures, the book includes sections on research designs, sampling procedures, and measurement instruments. Students are able to learn statistics in the context of real-life research problems. The book includes many charts, graphs, tables, examples, and exercises to help readers learn the procedures, visualize the data, and interpret and report the results. Interpretation of the analyses and conclusions are explained for each procedure to aid understanding and learning.



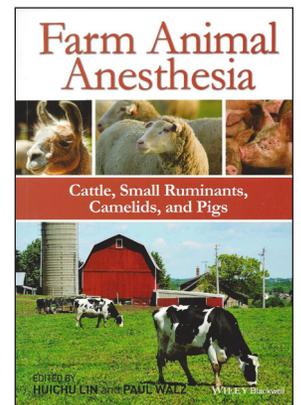
HuiChu Lin, a faculty member in the Department of Clinical Sciences of the College of Veterinary Medicine, came to Auburn University as Assistant Professor after completing a residency and master's program at the University of Illinois in 1990. Dr. Lin is currently a professor of Anesthesia and also serves as Equine Section Chief. Dr. Lin has published 23 book chapters and more than 60 articles in veterinary journals.



Farm Animal Anesthesia: Cattle, Small Ruminants, Camelids, and Pigs

Farm Animal Anesthesia: Cattle, Small Ruminants, Camelids, and Pigs presents practical guidance on using anesthetic and analgesic drugs to prevent pain caused by surgery or disease. This cohesive resource offers complete coverage of anesthetics and anesthetic techniques in farm animals with a focus on practical applications. Providing thorough information on pain management and residues, the book also covers specific techniques for common surgical procedures and considerations for animals with pathophysiological conditions.

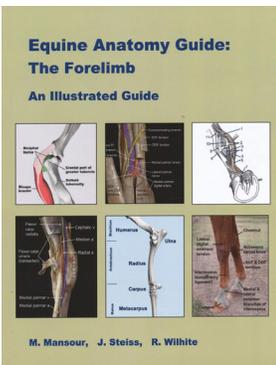
The book includes chapters on preanesthetic considerations, anesthetic drugs, chemical restraint and standing sedation, injectable anesthesia, inhalant anesthesia, local techniques, specific procedures, pain management, residues, and euthanasia. *Farm Animal Anesthesia* is a useful guide for farm animal practitioners, veterinary students, and researchers working with these species.





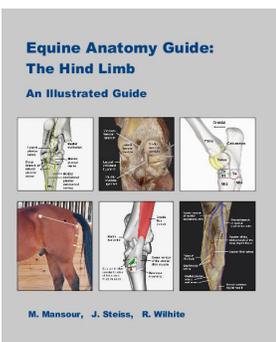
Mahmoud Mansour, a faculty member in the Department of Anatomy, Physiology & Pharmacology at the College of Veterinary Medicine, joined Auburn University as an Associate Professor in 2006. He received his Ph.D. from the University of Liverpool in the United Kingdom (December 1990) and his DVM from the University of Khartoum, Sudan in October 1983. Dr. Mansour received post-doctoral training at Michigan State University and was a recipient of Fulbright Scholarship (1995). He also received a research training course at the WHO at the headquarters in Geneva, Switzerland (1993). Dr. Mansour was a member of the faculty at Tuskegee University for several years before joining the faculty at Auburn University. He teaches gross anatomy of small animals (dogs & cats) and coordinates the course for the large animal anatomy. He authored, along with Dr. Janet Steiss (professor emeritus) and Dr. Ray Wilhite (coordinator for gross anatomy lab) and contribution from Dr. Paul Rumph (professor emeritus) two books on equine anatomy. The most recent book is titled “Equine Anatomy Guide: The Hindlimb, An Illustrated Guide.” This is the second in a four-book series detailing equine anatomy. The books are directed primarily towards first-year veterinary students, but their detailed illustrations and text offer both practical and clinical value to higher level students, practicing veterinarians, Pony Club members, and horse owners.

His research focuses on nuclear receptors and their roles in cancer. His lab is specifically interested in the molecular mechanisms of prostate cancer development, prostate cancer animal models, and novel targeted therapeutics. Prostate cancer is one of the most common types of cancer in men. There is a growing need for effective therapy that could be suitable for protection and/or treatment. We use primary cells and human prostate cancer cell lines coupled with molecular biology techniques to understand the mechanism by which novel compounds inhibit prostate cancer cell viability, motility and invasion.



Equine Anatomy Guide: The Forelimb

This guide to the equine forelimb is the first in a series of illustrated guides planned to cover the anatomy of the entire horse. The book is aimed at first year veterinary students, but will also be helpful for graduate veterinarians, students of equine science, Pony Club members and horse owners. Chapters include (1) the bones, (2) joints, (3) muscles and tendons, (4) blood vessels, lymphatics and nerves, (5) the hoof, (6) surface topography, (7) line drawings for review and self-testing, and (8) an appendix with instructions on the dissection of fresh tissue.



Equine Anatomy Guide: The Hind Limb

This is the second in a series of books on anatomy of the horse. The first book covered the forelimb. This book on the hind limb contains 132 illustrations in 92 pages. The book is a dissection guide for veterinary students but will also be helpful to others who are interested in equine anatomy.

Shiwen Mao received a Ph.D. in electrical and computer engineering from Polytechnic University, Brooklyn, NY, USA (now New York University Polytechnic School of Engineering) in 2004. He is the McWane Associate Professor in the Department of Electrical and Computer Engineering, Auburn University, Auburn, AL, USA. His research interests include wireless networks and multimedia communications, including cognitive radio, small cells, mmWave networks, Free Space Optical networks, and smart grid. He is on the Editorial Board of IEEE Transactions on Wireless Communications, IEEE Internet of Things Journal, IEEE Communications Surveys and Tutorials, Elsevier Digital Communications and Networks Journal, Elsevier Ad Hoc Networks Journal, and Wiley International Journal of Communication Systems. He served as the Director of E-Letter of Multimedia Communications Technical Committee (MMTC), IEEE Communications Society in 2012-2014, and MMTC Vice Chair—Letters & Member Communications in 2014-2016.



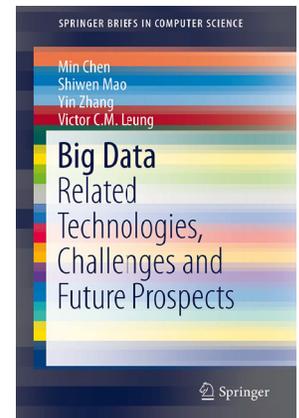
Dr. Mao is a Distinguished Lecturer of the IEEE Vehicular Technology Society (VTS) in the Class of 2014. He is a co-recipient of The IEEE ICC 2013 Best Paper Award. He received the 2013 IEEE ComSoc MMTC Outstanding Leadership Award and was named the 2012 Exemplary Editor of IEEE Communications Surveys and Tutorials. He was awarded the McWane Endowed Professorship in the Samuel Ginn College of Engineering for the Department of Electrical and Computer Engineering, Auburn University in August 2012. He received the US National Science Foundation Faculty Early Career Development Award (CAREER) in 2010. He is a co-recipient of The 2004 IEEE Communications Society Leonard G. Abraham Prize in the Field of Communications Systems, Runner-up for the 2013 Fabio Neri Best Paper Award, and The Best Paper Runner-up Award at QShine 2008. He also received Auburn Alumni Council Research Awards for Excellence—Junior Award and two Auburn Author Awards in 2011. He is a member of Tau Beta Pi and Eta Kappa Nu, and a senior member of the IEEE.

Big Data: Related Technologies, Challenges and Future Prospects

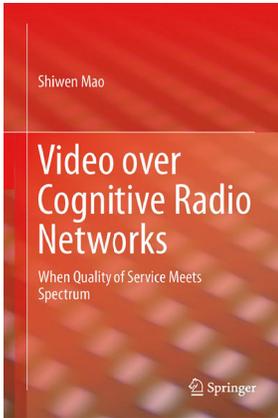
“How big is big?” Science writer Stephen Strauss asks in his fun book for kids titled *How Big is Big*, and explains that “bigness is something no one can consume.”

In this book, we aim to answer this interesting question, but in the context of computer data. In the big data era, we are dealing with the explosive increase of global data and enormous datasets. Unlike seemingly similar terms such as “massive data” or “very big data,” big data refers to the datasets that could not be perceived, acquired, managed, and processed by traditional Information Technology (IT) and software/hardware tools within a tolerable time. It can be characterized by four Vs, i.e., Volume (great volume), Variety (various modalities), Velocity (rapid generation), and Value (huge value but very low density).

We provide a comprehensive overview of the background and related technologies, challenges and future prospects of big data. We first introduce the general background of big data and review related technologies, such as cloud computing, Internet of Things (IoT), data centers, and Hadoop. We then focus on the four phases of the value chain of big data, i.e., data generation, data acquisition, data storage, and data analysis. For each phase, we introduce the general background, discuss the technical challenges, and review the latest advances. We next examine the several representative applications of big data, including enterprise management, IoT, online social networks, healthcare and medical applications, collective intelligence, and smart grid. This book is concluded with a discussion of open problems and future directions. We aim to provide to readers a comprehensive overview and big-picture of this exciting area. We hope this monograph could be a useful reference for graduate students and professionals in related fields, and general readers who will benefit from an understanding of the big data field.



Shiwen Mao (continued)



Video Streaming over Cognitive Radio Networks: When Quality of Service Meets Spectrum

A CR is a frequency-agile wireless communication device with intelligent control and a monitoring interface that enables efficient and flexible spectrum access. It capitalizes on advances in signal processing and radio technology (i.e., software defined radio (SDR)), as well as in spectrum regulation policy. A CR node can sense the radio environment to detect unused frequency bands (or, white spaces) and other state information. A cognitive engine makes intelligent decisions about adapting the radio operation and tuning its parameters. Its frequency-agile radio module is capable of reconfiguring RF and can be programmed to tune to a wide spectrum range and operate on any frequency bands in the range.

In this monograph, we investigate the problem of cross-layer design and optimization of CR video networks. The objective of this research is two-fold: (i) to develop theoretical bounds and performance limits for future CR video networks with an optimization approach, and emerging CR networks. Special consideration will be given to explore the trade-off between maximizing secondary user video quality and primary user protection, as well as quantifying and bounding the effect of sensing errors. We aim to develop a holistic analytical framework that allows the unification of the multidimensional cross-layer design space into a tractable, understandable research problem, complemented with distributed algorithm development for practical CR video systems. In particular, we adopt scalable video coding, such as fine-grained scalability (FGS) and medium grain scalable (MGS), to encode video streams. We tackle the problems of video over various CR networking paradigms, such as infrastructure-based CR networks, cooperative relay-based CR networks, femtocell-based CR networks, and multi-hop infrastructureless CR networks. We formulate cross-layer optimization problems that incorporate various system parameters and control knobs, and develop effective solution algorithms with proved optimal performance of tight performance bounds.

Melody Russell has been at Auburn University since 2002. She received her doctorate in Science Education from the University of Georgia in 2000 where her research focused on strategies for promoting the persistence of traditionally underrepresented minorities (URMs) in STEM. She also attended the University of Nebraska-Lincoln and attained a M.S. degree in the Biological Sciences. Dr. Russell received her Bachelor of Science from the Laboratory Animal Science department at North Carolina Agricultural and Technical State University.

As a faculty member at Auburn University, Dr. Russell's research interests include equity and social justice in STEM and Science Education; enhancing the participation of traditionally underrepresented and underserved groups in STEM degree programs and STEM careers; professional development for preservice and inservice teachers relative to strategies that promote, motivate, and engage students in meaningful learning and understanding of science through inquiry based instruction; and promoting informal science education (after-school programs, summer outreach programs) to broaden representation in STEM. Moreover, Dr. Russell's teaching interests include preparing preservice teachers through culturally relevant pedagogy for the STEM classroom. In addition, to supervising interns in secondary level science education, she currently teaches undergraduate and graduate level courses.

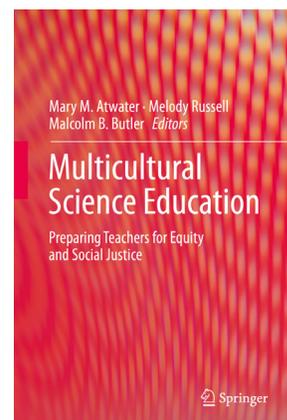


Multicultural Science Education

This book offers valuable guidance for science teacher educators looking for ways to facilitate preservice and inservice teachers' pedagogy relative to teaching students from underrepresented and underserved populations in the science classroom. It also provides solutions that will better equip science teachers of underrepresented student populations with effective strategies that challenge the status quo, and foster classrooms environment that promotes equity and social justice for all of their science students.

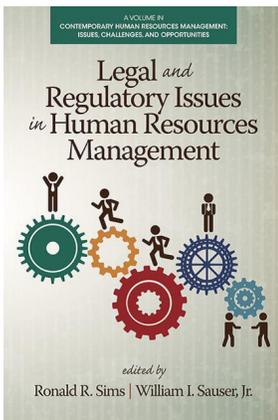
Multicultural Science Education illuminates historically persistent, yet unresolved issues in science teacher education from the perspectives of a remarkable group of science teacher educators and presents research that has been done to address these issues. It centers on research findings on underserved and underrepresented groups of students and presents frameworks, perspectives, and paradigms that have implications for transforming science teacher education. In addition, the chapters provide an analysis of the socio-cultural-political consequences in the ways in which science teacher education is theoretically conceptualized and operationalized in the United States.

The book provides teacher educators with a framework for teaching through a lens of equity and social justice, one that may very well help teachers enhance the participation of students from traditionally underrepresented and underserved groups in science, technology, engineering, and mathematics (STEM) areas and help them realize their full potential in science. Moreover, science educators will find this book useful for professional development workshops and seminars for both novice and veteran science teachers.





William I. Sauser, Jr., PhD is professor of management in the Harbert College of Business at Auburn University. Dr. Sauser earned his BS in management and MS and PhD in industrial/organizational psychology at the Georgia Institute of Technology and an MA in business ethics from the University of Wales. He is licensed to practice psychology in Alabama and holds specialty diplomas in industrial/organizational psychology and business consulting psychology from the American Board of Professional Psychology. Dr. Sauser's interests include organizational development, strategic planning, human relations in the workplace, business ethics, and continuing professional education. He is a frequent consultant to public, private, and voluntary-sector organizations and has been awarded the 2003 Frederick W. Taylor Key by the Society for Advancement of Management, the 2012 Harbert College of Business Excellence in Outreach Award, and the 2013 External Consulting Award and 2014 Algernon Sydney Sullivan Award by Auburn University. He also received Auburn Author Awards in 2012 and 2014.



Legal and Regulatory Issues in Human Resources Management

This edited book is intended to address the need for an updated look at the HRM legal and regulatory environment. Contrary to existing books which address legal issues in HRM from a narrower focus or specific issue (like sexual harassment, performance appraisal or employment termination), this book provides a comprehensive and in-depth look at legal issues, regulations and laws which govern all aspects of human resource management — recruitment, selection, placement, performance management (i.e., employee training and development), benefits and compensation — and specific issues such as job analysis, sexual harassment, and the like.

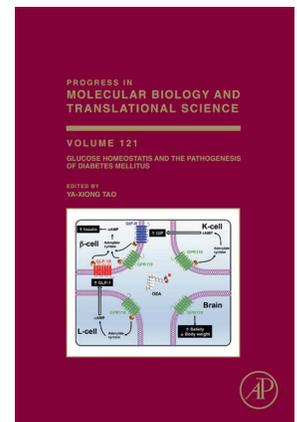
The contributors to this book offer their insight derived from their own research and practical experience with the HRM legal and regulatory environment/world of work. More specifically, the contributors examine, analyze and discuss challenges, issues and opportunities related to HRM legal and regulatory issues and the implications for employees and their organizations while emphasizing the importance of navigating such laws and regulations to the employment cycle and toward sustainable competitive advantage in today's and tomorrow's organizations.

Ya-Xiong Tao, a faculty member at the Department of Anatomy, Physiology & Pharmacology at the College of Veterinary Medicine, joined Auburn University as an Assistant Professor in 2004, was promoted to Associate Professor with tenure in 2009, and Professor in 2014. His research is on G protein-coupled receptors at the cell membrane that control almost every aspect of physiological functions. He has been working on several G protein-coupled receptors, including gonadotropin receptors that regulate reproduction, and melanocortin receptors that regulate energy and glucose homeostasis. He has obtained funding for his research from National Institutes of Health, American Diabetes Association and American Heart Association, among others. He has published extensively, with more than 80 peer-reviewed papers in top biomedical journals. He has delivered numerous lectures at universities and research institutes in USA, Canada, and China. He has edited five books, including four volumes in *Progress in Molecular Biology and Translational Science* and one volume of *Advances in Pharmacology* with the sixth book on genetics of obesity being published later in 2015. He teaches several courses, including *Physiology, Receptorology, and Molecular Endocrinology*, for veterinary and graduate students.



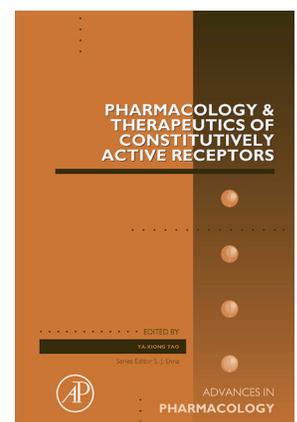
Glucose Homeostasis and the Pathogenesis of Diabetes Mellitus

Diabetes mellitus is at epidemic proportion in developed countries such as the United States, as well in Asia, especially in China and India, with tremendous health and economic burden. Diabetes can cause serious co-morbidities, including blindness, kidney failure, and heart disease. A better understanding of how normal glucose homeostasis is maintained and the pathogenesis is important to identify new ways for diabetes treatment. This volume covers how the blood glucose level is normally maintained within a normal range (glucose homeostasis) and how disruption of this homeostasis leads to the pathogenesis of diabetes mellitus. Chapters in this volume discuss several promising new drugs and targets for new drugs for diabetes treatment, including glucagon-like peptide 1, fatty acid receptors, and peroxisome proliferator-activated receptors, adiponectin receptors, and dietary manipulation. There are also chapters on diabetes in companion animals and diabetes and memory loss. Dr. Tao contributed three chapters for this volume consisting of 14 chapters.



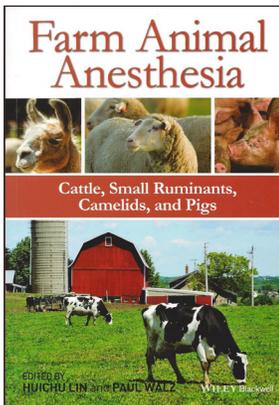
Pharmacology & Therapeutics of Constitutively Active Receptors

Receptors are signalling molecules that convey the information of extracellular signals such as hormones and neurotransmitters to the cells. In addition to signalling in response to agonist stimulation, some receptors can also initiate signalling in the absence of agonists, called constitutive activity. Some antagonists, including many of the top selling drugs, can decrease the basal constitutive activity, the so-called inverse agonists. In humans, mutations that change the basal activity cause several debilitating diseases, including cancer. Therefore the study of this constitutive activity is of interest not only in advancing our understanding of receptor pharmacology but also relevant in human diseases and therapeutics. This volume provides a summary of recent progress in this rapidly expanding field, covering different types of receptors, including G protein-coupled receptors, steroid receptors, and ion channel receptors. This volume should stimulate further research in this fascinating field of constitutive activity.





Paul Walz, an Associate Professor in the Department of Pathobiology of the College of Veterinary Medicine, came to Auburn University in 2004 after serving as an Assistant Professor in Kansas State University for four years. In the present, Dr. Walz serves the Coordinator of the Animal Health Research Unit of the Alabama Agriculture Experiment Station. Dr. Walz has published 7 book chapters and more than 45 peer reviewed articles in veterinary journals.



Farm Animal Anesthesia: Cattle, Small Ruminants, Camelids, and Pigs

Farm Animal Anesthesia: Cattle, Small Ruminants, Camelids, and Pigs presents practical guidance on using anesthetic and analgesic drugs to prevent pain caused by surgery or disease. This cohesive resource offers complete coverage of anesthetics and anesthetic techniques in farm animals with a focus on practical applications. Providing thorough information on pain management and residues, the book also covers specific techniques for common surgical procedures and considerations for animals with pathophysiological conditions.

The book includes chapters on preanesthetic considerations, anesthetic drugs, chemical restraint and standing sedation, injectable anesthesia, inhalant anesthesia, local techniques, specific procedures, pain management, residues, and euthanasia. *Farm Animal Anesthesia* is a useful guide for farm animal practitioners, veterinary students, and researchers working with these species.

J. Emmett Winn is a Professor of Communication in the Department of Communication and Journalism and has been serving as Associate Provost since 2009.

Winn earned his bachelor's and master's degrees in Communication from Auburn University and his Ph.D. from the University of South Florida. After earning his doctorate, he began teaching at Auburn. As a professor, he has educated students in courses including Introduction to Film Studies, History of International Cinema, and History of the American Film Industry, as well as graduate courses including Qualitative Methods.

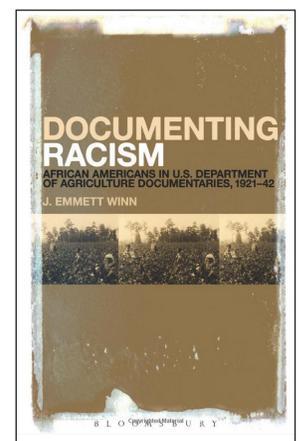
Dr. Winn is the author of the 2012 book *Documenting Racism: African Americans in U.S. Department of Agriculture Films* and the 2007 book *The American Dream and Contemporary Hollywood Cinema* both published by Continuum International Publishing Group. Dr. Winn also coedited the 2005 University of Alabama Press book *Transmitting the Past: Historical and Cultural Perspectives on Broadcasting*. Dr. Winn has also published numerous scholarly articles in international, national, and regional Communication and Film Studies journals including the *Journal of Communication*, *Critical Studies in Mass Communication*, the *Southern Communication Journal*, the *Journal of Broadcasting and Electronic Media*, *Film and History*, and *Kinema*.

In 2011, Winn was chosen as a distinguished alumnus by the University of South Florida and in 2013 he received the T. Earle Johnson-Edwin Paget Distinguished Service Award from the Southern States Communication Association.

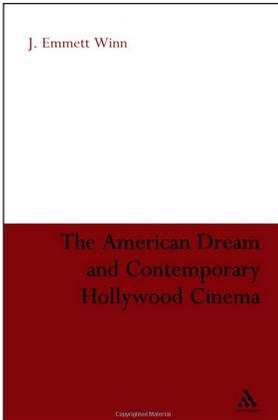
As Associate Provost, Winn provides insight and leadership concerning academic and administrative issues across all colleges and schools at the University. Dr. Winn provides leadership to several academic areas including the Office of Information Technology, the Registrar's Office, the Jules Collins Smith Museum of Fine Art, the Office of Accessibility, the Office of International Programs, and the Biggio Center for the Enhancement of Teaching and Learning. Additionally, Dr. Winn directs and prioritizes the assignment and allocation of space for all academic units on campus and is the chief academic liaison with Auburn's Facilities Management Division. As the academic officer on campus involved with facilities, Dr. Winn serves with fellow stakeholders from across the university on issues related to building renovation, construction, space management, and campus planning. He serves as the chief academic liaison with Auburn's Facilities Management Division and works alongside stakeholders to address issues associated with building renovation, construction, space management, and campus planning.

Documenting Racism: African Americans in US Department of Agriculture Documentaries, 1921-42

From the silent era through the 1950s, the U.S. Department of Agriculture was the preeminent government filmmaking organization. In the United States, USDA films were shown in movie theaters, public and private schools at all educational levels, churches, libraries and even in open fields. For many Americans in the early 1900s, the USDA films were the first motion pictures they watched. And yet USDA documentaries have received little serious scholarly attention. The lack of serious study is especially concerning since the films chronicle over half a century of American farm life and agricultural work and, in so doing, also chronicle the social, cultural, and political changes in the United States at a crucial time in its development into a global superpower. Focusing specifically on four key films, Winn explicates the representation of African Americans in these films within the socio-political context of their times. The book provides a clearer understanding of how politics and filmmaking converged to promote a governmentally sanctioned view of racism in the U.S. in the early 20th century.



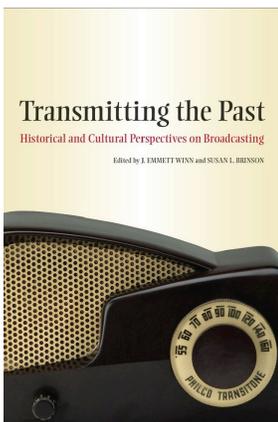
J. Emmett Winn (continued)



The American Dream and Contemporary Hollywood Cinema

While the myth of a classless America endures in the American Dream, the very stratification that it denies unfairly affects the majority of Americans. Study after study shows that it's increasingly difficult for working class people to achieve upward mobility in the US - so how does the American Dream continue to thrive?

J. Emmett Winn shows us that the American Dream's continued glorification in contemporary Hollywood cinema should not be ignored. The book explicates three major themes surrounding the American Dream in contemporary Hollywood cinema and relates those findings to the United States' social and cultural changes in the last 25 years. Through his thoughtful analysis of films as diverse as *Working Girl*, *Titanic*, *Pretty Woman*, *Flashdance*, *The Firm*, *Good Will Hunting*, *Saturday Night Fever*, *Wall Street* and many others, Winn shows that contemporary Hollywood is very much in the business of keeping the Dream alive.



Transmitting the Past: Historical and Cultural Perspectives on Broadcasting

The essays included in this anthology represent some of the best cultural studies historical research on broadcasting in the U. S. currently underway. Each one concentrates on a particular event in broadcast history - beginning with Marconi's introduction of wireless technology in 1899. Michael Brown examines newspaper reporting in America of Marconi's belief in Martians, stories that effectively rendered Marconi inconsequential to the further development of radio. The widespread installation of radios in automobiles in the 1950s, Matthew Killmeier argues, paralleled the development of television and ubiquitous middle-class suburbia in America. Heather Hundley analyzes depictions of male and female promiscuity as presented in the sitcom *Cheers* at a time concurrent with media coverage of the AIDS crisis. Fritz Messere examines the Federal Radio Act of 1927 and the clash of competing ideas about what role radio should play in American life. Chad Dell recounts the high-brow programming strategy NBC adopted in 1945 to distinguish itself from other networks. And George Plasketes studies the critical reactions to *Cop Rock*, an ill-fated combination of police drama and musical, as an example of society's resistance to genre-mixing or departures from formulaic programming. The result is a collection that represents some of the most recent and innovative scholarship, cultural and historical, on the intersection between the medium of broadcasting and American cultural, political, and economic life.

“*There is nothing to writing. All you do is sit down at a typewriter and bleed.*”

—Ernest Hemingway



AUBURN UNIVERSITY

GRADUATE SCHOOL

© March 2015. Auburn University Graduate School.
Auburn University is an equal opportunity educational institution/employer.