UC Davis UC Davis Previously Published Works

Title

Color vision: introduction by the feature editors.

Permalink

https://escholarship.org/uc/item/9cr9c1zw

Journal

Journal of the Optical Society of America. A, Optics, image science, and vision, 33(3)

ISSN 1084-7529

Authors

Buck, Steven L Baraas, Rigmor Lee, Barry B <u>et al.</u>

Publication Date

2016-03-01

DOI

10.1364/josaa.33.000cv1

Peer reviewed





Color vision: introduction by the feature editors

Steven L. Buck,^{1,*} Rigmor Baraas,² Barry B. Lee,³ Delwin T. Lindsey,⁴ Keiji Uchikawa,⁵ Michael A. Webster,⁶ and John S. Werner⁷

¹Department of Psychology, University of Washington, Seattle, Washington 98195-1525, USA ²Optometry and Visual Science, Buskerud and Vestfold University College, 3611 Kongsberg, Norway ³SUNY College of Optometry, New York, New York 10036-8003, USA ⁴College of Optometry, Ohio State University, Columbus, Ohio 43210, USA ⁵Department of Information Sciences, Tokyo Institute of Technology, Yokohama 226-8502, Japan ⁶Department of Psychology, University of Nevada, Reno, Reno, Nevada 89557, USA ⁷Department of Ophthalmology, University of California–Davis, Davis, California 95817, USA *Corresponding author: sbuck@uw.edu

Received 8 February 2016; posted 8 February 2016 (Doc. ID 259097); published 1 March 2016

This feature issue of the *Journal of the Optical Society of America A* (JOSA A) reflects the basic and applied research interests of members of the color vision community. Most of the articles stem from presentations at the 23rd Biennial Symposium of the International Colour Vision Society (ICVS). ©2016 Optical Society of America

OCIS codes: (330.1690) Color; (330.1720) Color vision.

http://dx.doi.org/10.1364/JOSAA.33.000CV1

Since it inception in 1917, the *Journal of the Optical Society of America* has served as an important forum for research on color vision. This feature issue on color vision continues that distinguished tradition, presenting peer-reviewed papers from frontiers in both basic and applied research on color vision, including perception and psychophysics, physiology and anatomy, and color-vision deficiencies.

Most of the articles in this issue, including the Verriest Lecture by Professor John S. Werner, are based on presentations at the 23rd Biennial Symposium of the International Colour Vision Society (ICVS) that was held at Tohoku University, Sendai, Japan, July 3–7, 2015. Contributions to the conference reflect the diversity of interests of the members of the ICVS, who include physiologists, psychologists, physicists, engineers, geneticists, optometrists, ophthalmologists, and other related professionals with interests in color vision and color-vision deficiencies.

We are all grateful for the tireless efforts of the local organizers—Keiji Uchikawa (lead organizer, Tokyo Institute of Technology), Kazuho Fukuda (Kogakuin University), Kowa Koida (Toyohashi University of Technology), Ichiro Kuriki (Tohoku University), Kazumichi Matsumiya (Tohoku University), Yoko Mizokami (Chiba University), Takehiro Nagai (Yamagata University), Shigeki Nakauchi (Toyohashi University of Technology), and Kenji Yokoi (National Defense Academy of Japan)—and for the generous hospitality of Tohoku University. To learn more about ICVS and to find information about regular or discounted student membership, visit the website: www.icvs.info. We invite you to join us for the 24th Biennial Symposium, to be held in Erlangen, Germany, in August 2017.

The editors of this special issue are grateful to the contributors and referees who made this issue possible. We especially thank previous Editor-in-Chief Dr. Franco Gori for the opportunity to publish in this special issue and *JOSA A* staff for their patient and diligent assistance.

2015 VERRIEST MEDAL AWARDED TO PROFESSOR JOHN S. WERNER

The International Colour Vision Society (ICVS) awarded the 2015 Verriest Medal to Professor John S. Werner at the 23nd Biennial ICVS Symposium that took place in Sendai, Japan, July 3–7, 2015. This award was established in 1991 in memory of the founding member of the Society, Dr. Guy Verriest, and honors outstanding contributions in the field of color vision.

Professor Werner received his Ph.D. from Brown University under the supervision of Professor Billy Wooten in the Walter S. Hunter Laboratory of Psychology. He conducted postdoctoral research with Professor Jan Walraven at the Institute for Perception–TNO in Soesterberg, The Netherlands. He was a member of the Psychology faculty at the University of Colorado, Boulder and is presently a Distinguished Professor of Ophthalmology at the University of California Davis, where he also holds appointments in Vision Science, and Neurobiology, Physiology & Behavior.



Professor John S. Werner

An active member of ICVS and of its predecessor, IRGCVD, he is also a fellow of the American Association

for the Advancement of Science, American Psychological Association, American Psychological Society, Association for Research in Vision and Ophthalmology, the Gerontological Society of America, and the Optical Society of America. He received the Pisart Vision Award from Lighthouse International, and he presented the University of Colorado, Boulder distinguished research lecture and the Optical Society of America Robert M. Boynton lecture.

Professor Werner has made important contributions to our knowledge of the development and aging of color mechanisms using psychophysics, VEPs, and most recently optical imaging techniques, OCT, and adaptive optics. He has contributed to our understanding of the processes of aging in perception, particularly as they relate to plasticity and potential clinical applications. Throughout his career he has maintained an active interest in opponent color mechanisms, color in art, and color illusions.

A generation of vision scientists has enjoyed the benefits of reading the many books he has coedited. These include *Visual Perception: The Neurophysiological Foundations, Color Vision: Perspectives from Different Disciplines, The Visual Neurosciences,* and *The New Visual Neurosciences,* which, like Professor Werner's own research, have brought together discoveries from anatomy, physiology, and psychophysics to illuminate fundamental mechanisms underlying human perception.



Attendees of the 23rd Symposium of the International Colour Vision Society, Sendai, Japan, July 3-7, 2015.