

# VITAE

**NAME:**               **Wei R. Chen**

**POSITION TITLE:**

Interim Dean  
College of Mathematics and Science  
University of Central Oklahoma

Director  
Center for Interdisciplinary Biomedical Education and Research (CIBER)  
College of Mathematics and Science  
University of Central Oklahoma

Professor  
Biomedical Engineering Program  
Department of Engineering and Physics  
University of Central Oklahoma

**EDUCATION:**

Shandong University, Jinan, China	B.S.	Feb. 1982	Physics
University of Oregon, Eugene, Oregon	M.S.	June 1984	Physics
University of Oregon, Eugene, Oregon	Ph.D.	Aug. 1988	Physics
University of Oregon, Eugene, Oregon	Postdoc.	1989	Physics

**PROFESSIONAL SOCIETY:**

American Physical Society, 1984-1995

SPIE- The International Society for Optics and Photonics, 1992-present

Member: Executive Organizing Committee, Biomedical Optics (BiOS) Symposium, 2006-Present

Fellow, SPIE 2007-Present

Central Oklahoma Alliance for Physics Teaching, 1992-1996

Vice Chair, 1992-1993; Chair, 1993-1994

Sigma Xi, 1999-Present

President-Elect, University of Central Oklahoma Chapter, 2004-2005; 2011-2012

President, University of Central Oklahoma Chapter, 2005-2006; 2012-2013

Past President, University of Central Oklahoma Chapter, 2006-2007; 2013-2014

Oklahoma Academic of Science, 1999-present

Vice Chair, Engineering Science Section, 2002-2003

Chair, Engineering Science Section, 2003-2004

Vice Chair, Engineering Science Section, 2004-2005

Member of Oklahoma Academic of Science Council, 2002-2005

Council of Chinese American Deans and Presidents (CCADP)

Founder and Member, 2007-present

Secretary/Treasurer, 2008-2010

**ACADEMIC APPOINTMENTS:**

- 1983-1988 *Research Assistant*, Institute of Theoretical Science, University of Oregon
- 1987-1988 *Teaching Assistant*, Department of Physics, University of Oregon
- 1988-1989 *Assistant Professor of Physics*, Parks College of St. Louis University
- 1989 *Research Associate*, Institute of Theoretical Science, University of Oregon
- 1990 *Visiting Research Associate*, Dept. of Physics and Astronomy, University of Oklahoma
- 1990-1996 *Adjunct Assistant Professor of Physics*, Dept. of Physics, University of Oklahoma
- 1989-1999 *Instructor of Physics*, Oklahoma School of Science and Mathematics
- 1994-1999 *Lecturer of Physics*, Department of Physics, University of Central Oklahoma
- 1998, Summer *Visiting Research Scientist*, Department of Radiology, University of Virginia
- 1999-2001 *Assistant Professor of Physics and Engineering*, Department of Physics and Engineering, University of Central Oklahoma
- 1999-2000, Summer *Visiting Research Scientist*, Department of Radiology and Biomedical Engineering, The Johns Hopkins University
- 2001, Summer *Senior Research Scientist*, School of Electrical Engineering, University of Oklahoma
- 2001- 2005 *Associate Professor of Physics and Engineering*, Department of Physics and Engineering, University of Central Oklahoma
- 2001- 2006 *Director of Biomedical Engineering Program*, Department of Physics and Engineering, University of Central Oklahoma
- 2004- 2007 *Adjunct Associate Professor of Physics*, Department of Physics, College of Arts and Sciences, Oklahoma State University
- 2007-Present *Adjunct Professor of Physics*, Department of Physics, College of Arts and Sciences, Oklahoma State University
- 1996-Present *Adjunct Associate Professor of Physics*, Department of Physics, University of Oklahoma
- 2001- Present *Adjunct Associate Professor*, School of Aerospace and Mechanical Engineering, University of Oklahoma
- 2004- Present *Adjunct Associate Professor of Veterinary Clinical Sciences*, Department of Veterinary Clinical Sciences, College of Veterinary Medicine, Oklahoma State University
- 2005 - Present *Professor of Engineering and Physics*, Department of Engineering and Physics, University of Central Oklahoma
- 2006 - 2015 *Assistant Dean*, College of Mathematics and Science, University of Central Oklahoma
- 2006 - 2009 *Campus and Program Coordinator*, National Science Foundation (NSF) SURE-STEP Program (Supporting Undergraduate Research and Education for the Science, Technology, Engineering, and Mathematics Talent Expansion Program), University of Central Oklahoma
- 2009 - 2015 *Principal Investigator/Project Director*, Oklahoma National Science Foundation (NSF) STEP Program, Oklahoma
- 2010 - Present *Founder and Director*, Center for Interdisciplinary Biomedical Education and Research (CIBER), College of Mathematics and Science, University of Central Oklahoma
- 2010 - Present SPIE (The International Society for Optics and Photonics)'s *Alternate Director* on the ABET Board
- 2015 - Present *Interim Dean*, College of Mathematics and Science, University of Central Oklahoma

**PROFESSIONAL EXPERIENCE:**

**Conference Organization:**

- Member* Program Committee of SPIE International Conference of Laser-Tissue Interaction IX; and Chair, “Immunologic Mechanisms During PDT” session, Photonics West; January 1998, San Jose, CA
- Member* Program Committee of SPIE International Conference of Biomedical Optics and Lasers: Diagnostics and Treatment; and Chair, “Cancer Treatment” session, Photonics China ‘98, September 16-19, 1998, Beijing, China
- Member* Program Committee of SPIE International Conference of Laser-Tissue Interaction X; and Chair, “Immunologic Responses to Thermal and PDT Effects” session, Photonics West; January 1999, San Jose, CA
- Member* International Academic Committee and Organization Committee, International Conference on Biomedical Optics (BMO '99), October 25-27, 1999, Wuhan, China
- Member* Program Committee of SPIE International Conference of Laser-Tissue Interaction XI; and Chair, “PDT and Immunotherapy” session, Photonics West; January 2000, San Jose, CA
- Member* Program Committee of the 13<sup>th</sup> IEEE Symposium on Computer-Based Medical Systems, June 23-24, 2000, Houston, TX
- Member* Program Committee of SPIE International Conference of Biomedical Photonics and Optoelectronic Imaging; and Chair, “Applications” session, November 8-10, 2000, Beijing, China
- Member* Program Committee of SPIE International Conference of Laser-Tissue Interaction XII; and Chair, “PDT and Immunotherapy” and “PDT” sessions, Photonics West; January 2001, San Jose, CA
- Member* Program Committee of Wuhan International Workshop on Photonics and Imaging in Biology and Medicine (PIBM'01); and Chair of two sessions, October 8-10, 2001, Wuhan, China
- Member* Program Committee of SPIE International Conference of Laser-Tissue Interaction XIII; and Chair, “Photochemical and thermal injury effects that induce immune responses to cancer” sessions, Photonics West; January 2002, San Jose, CA
- Chair* Saratov International Workshop on Biophotonics – SIWB-02, June 19 - 21, 2002, Saratov, Russia
- Member* Program Committee of SPIE International Conference of Optics in Health Care and Biomedical Optics: Diagnostics and Treatment, Photonics Asia; October 14-18, 2002, Shanghai, China
- Member* Program Committee of SPIE International Conference of Laser-Tissue Interaction XIV; and Chair, “PDT and Photothermal Effects on Immunologic Responses” session, Photonics West; January 2003, San Jose, CA
- Member* International Advisory Committee and Program Committee of International Conference Photonics Pacific Rim - Photonics and Imaging in Biology and Medicine (PIBM2003), June 8-12, 2003, Wuhan, China
- Member* Program Committee of International Conference of Advanced Laser Technologies (ALT'03), September 19-23, 2003, Bedfordshire, United Kingdom

- Member* International Program Committee, Saratov Fall Meeting 2003: Optical Technologies in Biophysics and Medicine V, October 7-10, 2003, Saratov, Russia
- Moderator* Engineering Sciences Section, Oklahoma Academy of Science 92<sup>nd</sup> Technical Meeting, November 7, 2003, Chickasha, Oklahoma
- Member* Program Committee of SPIE International Conference of Laser Interaction with Tissue and Cells XV;  
and Chair, “Photodynamic Therapy I” and “Photodynamic Therapy II” sessions, Photonics West; January 24-29, 2004, San Jose, CA
- Member* International Program Committee of Saratov Fall Meeting - SFM'04, Workshop on Optical Technologies in Biophysics & Medicine VI, September 21 - 24, 2004, Saratov, Russia
- Member* Program Committee of SPIE International Conference of Optics in Health Care and Biomedical Optics: Diagnostics and Treatment II (PA104), Photonics Asia;  
and Chair, “Brain, Cancer, Molecular Beacons” and “Microscopy and Photonics Technology in Genomics and Proteomics of Cell I” sessions, November 8-12 November 2004, Beijing, China
- Member* Organizing / Technical Program Committee of Second Asian and Pacific Rim Symposium on Biophotonics (APBP), December 15-17, 2004, Taipei, Taiwan
- Member* Program Committee of SPIE International Conference of Laser Interaction with Tissue and Cells XVI;  
and Chair of Sessions “PDT I” and “PDT II”, Photonics West; January 22-27, 2005, San Jose, CA
- Member* Scientific Organizing Committee of The 4<sup>th</sup> Photonics and Imaging in Biology and Medicine - PIBM05,  
and Chair, “Laser Interaction with Matter and Biological Materials” Session, September 3 - 6, 2005, Tianjin, China
- Member* International Program Committee of Saratov Fall Meeting - SFM'05, Workshop on Optical Technologies in Biophysics & Medicine VII, September 27 - 30, 2005, Saratov, Russia
- Moderator* Engineering Sciences Section, Oklahoma Academy of Science 94<sup>th</sup> Technical Meeting, November 5, 2005, Oklahoma City, Oklahoma
- Chair* SPIE International Conference of Biophotonics and Immune Responses;  
and Chair of Session “Photo-immune interactions”, Photonics West; January, 2006, San Jose, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics III, Photonics West; January, 2006, San Jose, CA
- Member* Executive Organizing Committee of SPIE International Symposium BIOS 2006 (Biomedical Optics), January, 2006, San Jose, CA
- Member* Program Committee of The 5<sup>th</sup> International Conference on Photonics and Imaging in Biology and Medicine (PIBM 2006);  
and Chair of Plenary Session V; September 1-3, 2006, Wuhan, China.
- Member* International Program Committee of Saratov Fall Meeting - SFM'06, Workshop on Optical Technologies in Biophysics & Medicine VIII, September 26 - 29, 2006, Saratov, Russia
- Panelist* Special Session “Laser in Surgery”, American College of Surgeons 92<sup>nd</sup> Annual Clinical Congress, October 10, 2006, Chicago, IL
- Member* Executive Organizing Committee of SPIE International Symposium BIOS 2007 (Biomedical Optics), January, 2007, San Jose, CA

- Chair* SPIE International Conference of Biophotonics and Immune Responses II; and Chair of Session “Photo-immune interactions”, Photonics West; January, 2007, San Jose, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics IV, and Chair of Session “Dynamics of Laser Induced Nanoparticle Photothermolysis”, Photonics West; January, 2007, San Jose, CA
- Member* Program Committee of SPIE International Conference of Optical Interactions with Tissue and Cells XVIII; Photonics West; January, 2007, San Jose, CA
- Member* Scientific Committee, 11th World Congress on International Photodynamic Association; March 28-31, 2007, Shanghai, China
- Member* International Program Committee of Saratov Fall Meeting - SFM'07, Workshop on Optical Technologies in Biophysics & Medicine IX, September 25 - 28, 2007, Saratov, Russia
- Member* International Advisory Committee and Program Committee of International Conference Photonics Pacific Rim - Photonics and Imaging in Biology and Medicine (PIBM2007), and Chair, Plenary Session II  
November 4-6, 2007, Wuhan, China
- Member* Program Committee of SPIE International Conference of Optics in Health Care and Biomedical Optics  
and Chair, “Light-tissue interaction and modeling” Session.  
Photonics Asia, November 11-15, 2007, Beijing, China
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2008 (Biomedical Optics), January 19-24, 2008, San Jose, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses III; and Chair of Session “Monitoring Techniques”, Photonics West; January 21, 2008, San Jose, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics V, Photonics West; January 19, 2008, San Jose, CA
- Member* International Program Committee of Saratov Fall Meeting - SFM'08, Workshop on Optical Technologies in Biophysics & Medicine X, September 23 - 26, 2008, Saratov, Russia
- Member* Program Committee of 7<sup>th</sup> International Conference on Photonics and Imaging in Biology and Medicine (PIBM2008), November 24-27, 2008, Wuhan, China
- Member* Program Committee, Session “Laser Biomedical Diagnostics”, International Conference on Laser Applications in Life Sciences, December 4-6, 2008, Taipei, Taiwan
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2009 (Biomedical Optics), January 24-29, 2009, San Jose, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics VI,  
and Chair of Session “Cell and Tissue Spectroscopy and Imaging”  
Photonics West; January 24, 2008, San Jose, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses IV; and Chair of Session “Detections of Photoimmune Activities”, Photonics West; January 26, 2009, San Jose, CA
- Organizer - Secretary/Treasurer* 7<sup>th</sup> Forum of Council of Chinese American Deans and Presidents (CCADP), January 30 – February 1, 2009, San Francisco, CA

- Member* International Advisory Committee and Program Committee of Symposium on Photonics and Optoelectronics (SOPO), August 23-25, 2009, Wuhan, China
- Member* Program Sub-Committee on “Laser Chemistry, Biophotonics and Applications” of The 8<sup>th</sup> Pacific Rim Conference on Lasers and Electro-Optics (CLEO/PR 2009), August 30 – September 3, 2009, Shanghai, China
- Member* International Program Committee of Saratov Fall Meeting - SFM'09, Workshop on Optical Technologies in Biophysics & Medicine XI, September 21-24, 2009, Saratov, Russia
- Member* International Program Committee of Saratov Fall Meeting - SFM'09, Workshop on Internet Biophotonics II, September 21-24, 2009, Saratov, Russia
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2010 (Biomedical Optics), January 23-28, 2010, San Francisco, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics VI, Photonics West; January 23-28, 2010, San Francisco, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses V; and Chair of Session “Photoimmunotherapy: Pre-clinical”, Photonics West; January 23-28, 2010, San Francisco, CA
- Organizer - Secretary/Treasurer* 8<sup>th</sup> Forum of Council of Chinese American Deans and Presidents (CCADP), January 29 - 31, 2010, San Francisco, CA
- Panelist and Invited Speaker* The Sino-American Presidents and Deans Forum – Quality Assurance and Global Strategy in Higher Education, August 3, 2010, Shanghai, China
- Member* International Program Committee of Saratov Fall Meeting - SFM'10, Workshop on Optical Technologies in Biophysics & Medicine XII, October 5-8, 2010, Saratov, Russia
- Member* International Program Committee of Saratov Fall Meeting - SFM'10, Workshop on Internet Biophotonics III, October 5-8, 2010, Saratov, Russia
- Member* Program Committee of SPIE International Conference of Optics in Health Care and Biomedical Optics IV, Photonics Asia, October 18-20, 2010, Beijing, China
- Member* Program Committee of 9<sup>th</sup> International Conference on Photonics and Imaging in Biology and Medicine (PIBM2010), November 3-5, 2010, Wuhan, China
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2011 (Biomedical Optics), 22-27 January 2011, San Francisco, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics VII, Photonics West; 22-27 January 2011, San Francisco, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses VI; and Chair of Session “Photoimmunotherapy: Pre-clinical”, Photonics West; 22-27 January 2011, San Francisco, CA
- Member* International Program Committee of Saratov Fall Meeting - SFM'11, Workshop on Optical Technologies in Biophysics & Medicine XIII, September 27-30, 2011, Saratov, Russia
- Member* International Program Committee of Saratov Fall Meeting - SFM'11, Workshop on Internet Biophotonics IV, September 27-30, 2011, Saratov, Russia
- Member* Program Committee of 10<sup>th</sup> International Conference on Photonics and Imaging in Biology and Medicine (PIBM2011), November 2-5, 2011, Wuhan, China
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2012 (Biomedical Optics), 21-26 January 2012, San Francisco, CA

- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics VII, Photonics West; 21-26 January 2012, San Francisco, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses VII; and Chair of Session “Laser-Nanotechnology”, Photonics West; 21-26 January 2012, San Francisco, CA
- Member* Organizing Committee, Symposium “Cosmos, Cancer, Criticality and Chromoplasmology”, May 6, 2012, Seattle, WA
- Member* International Program Committee of Saratov Fall Meeting - SFM'12, Workshop on Optical Technologies in Biophysics & Medicine XIV, September 25-28, 2012, Saratov, Russia
- Member* International Program Committee of Saratov Fall Meeting - SFM'12, Workshop on Internet Biophotonics V, September 25-28, 2012, Saratov, Russia
- Member* Program Committee of SPIE International Conference of Optics in Health Care and Biomedical Optics V, Photonics Asia, November 4-7, 2012, Beijing, China
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2013 (Biomedical Optics), 2-7 February 2013, San Francisco, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics IX, Photonics West; 2-7 February 2013, San Francisco, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses VIII, Photonics West; 4 February 2013, San Francisco, CA
- Member* Program Committee of 11<sup>th</sup> International Conference on Photonics and Imaging in Biology and Medicine (PIBM2013), May 26-29, 2013, Wuhan, China
- Honorable Chair* The 3<sup>rd</sup> Shanghai International Forum on Photodynamic Medicine, June 1-2, 2013, Shanghai, China
- Lecturer* The 3<sup>rd</sup> Shanghai International Forum on Photodynamic Medicine, June 1, 2013, Shanghai, China
- Member* International Program Committee of Saratov Fall Meeting - SFM'13, Workshop on Optical Technologies in Biophysics & Medicine XV, September 25-28, 2013, Saratov, Russia
- Member* International Program Committee of Saratov Fall Meeting - SFM'13, Workshop on Internet Biophotonics VI, September 25-28, 2013, Saratov, Russia
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2014 (Biomedical Optics), 1-6 February 2014, San Francisco, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics X, Photonics West; 1-6 February 2014, San Francisco, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses IX; Photonics West; 1-6 February 2014, San Francisco, CA
- Member* International Program Committee of Saratov Fall Meeting - SFM'15, Optical Technologies in Biophysics & Medicine XVII, September 22-25, 2015, Saratov, Russia
- Member* International Program Committee of Saratov Fall Meeting - SFM'15, Internet Biophotonics VIII, September 22-25, 2015, Saratov, Russia
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2015 (Biomedical Optics), 21-26 January 2015, San Francisco, CA

- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics XI, Photonics West; 21-26 January 2015, San Francisco, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses X; Photonics West; 21-26 January 2015, San Francisco, CA
- Member* Program Committee of Track 5, Biophotonics and Optical Sensors, Asia Communication and Photonics Conference 2015 (ACP 2015), November 19-23, 2015, Hong Kong
- Member* Executive Organizing Committee of SPIE International Symposium BiOS 2016 (Biomedical Optics), 13-18 February 2016, San Francisco, CA
- Member* Program Committee of SPIE International Conference of Complex Dynamics and Fluctuations in Biomedical Photonics XII, Photonics West; 13-18 February 2016, San Francisco, CA
- Chair* SPIE International Conference of Biophotonics and Immune Responses XI; Photonics West; 13-18 February 2016, San Francisco, CA

**Journal Editing:**

- Chair/Editor* SPIE Proceedings Volume 6087 “Biophotonics and Immune Responses”, 2006
- Chair/Editor* SPIE Proceedings Volume 6438 “Biophotonics and Immune Responses II”, 2007
- Chair/Editor* SPIE Proceedings Volume 6857 “Biophotonics and Immune Responses III”, 2008
- Chair/Editor* SPIE Proceedings Volume 7178 “Biophotonics and Immune Responses IV”, 2009
- Chair/Editor* SPIE Proceedings Volume 7565 “Biophotonics and Immune Responses V”, 2010
- Chair/Editor* SPIE Proceedings Volume 7900 “Biophotonics and Immune Responses VI”, 2011
- Chair/Editor* SPIE Proceedings Volume 8224 “Biophotonics and Immune Responses VII”, 2012
- Chair/Editor* SPIE Proceedings Volume 8582 “Biophotonics and Immune Responses VIII”, 2013
- Chair/Editor* SPIE Proceedings Volume 8944 “Biophotonics and Immune Responses IX”, 2014
- Chair/Editor* SPIE Proceedings Volume 9324 “Biophotonics and Immune Responses X”, 2015
- Chair/Editor* SPIE Proceedings Volume 9709 “Biophotonics and Immune Responses XI”, 2016
- Associate Editor* *Journal of X-Ray Science and Technology*, 2004 – 2010
- Editor-in-Chief* *Journal of X-Ray Science and Technology*, 2011 – 2015
- Member* Editorial Board of *Journal on Biomedical Photonics*, 2007 – present
- Member* Editorial Board of *Journal of Innovative Optical Health Sciences (JIOHS)*, 2007 – present
- Guest Editor* Special Issue “Biophotonics”, 2002, *Journal of X-Ray Science and Technology*
- Ad Hoc Associate Editor* *Journal of Medical Physics*, 2007 (MS #07-870)

**Journal Review:**

- Reviewer* *Academic Radiology*
- Reviewer* *Acta Pharmacologica Sinica*
- Reviewer* *Annals of Biomedical Engineering*
- Reviewer* *Apoptosis*
- Reviewer* *Applied Optics*
- Reviewer* *Applied Physics Letters*
- Reviewer* *Biochemical and Biophysical Research Communications*
- Reviewer* *Bioconjugate Chemistry (2014-04)*
- Reviewer* *Biopolymers (2014-04)*
- Reviewer* *Biosensors & Bioelectronics*
- Reviewer* *Biotechnology Advances*



Reviewer *Breast Cancer Research and Treatment*  
Reviewer *British Journal of Cancer*  
Reviewer *Cancer Immunology Immunotherapy*  
Reviewer *Cancer Letters*  
Reviewer *Cancer Research (2014-07)*  
Reviewer *Cell Cycle*  
Reviewer *European Journal of Cancer*  
Reviewer *IEEE Transactions on Biomedical Engine*  
Reviewer *IEEE Transactions on Education*  
Reviewer *Immunological Methods*  
Reviewer *International Journal of Cancer*  
Reviewer *International Journal of Hyperthermia*  
Reviewer *International Journal of Nanomedicine*  
Reviewer *Journal of Biomechanical Engineering – Transactions of ASME*  
Reviewer *Journal of Biomedical Optics*  
Reviewer *Journal of Biophotonics*  
Reviewer *Journal of Cellular Physiology*  
Reviewer *Journal of Innovative Optical Health Sciences*  
Reviewer *Journal of Photochemistry and Photobiology B: Biology*  
Reviewer *Journal of X-Ray Science and Technology*  
Reviewer *Lasers in Surgery and Medicine*  
Reviewer *Measurement Science and Technology*  
Reviewer *Medical and Biological Engineering and Computing*  
Reviewer *Medical Physics*  
Reviewer *Medicinal Research Reviews*  
Reviewer *Molecular and Cellular Biochemistry*  
Reviewer *Nanomedicine*  
Reviewer *Nanomedicine: Nanotechnology, Biology and Medicine*  
Reviewer *Nano Research*  
Reviewer *Nature Communications (2014-01, 2014-10)*  
Reviewer *Optical Engineering*  
Reviewer *Optics Express*  
Reviewer *Photochemistry and Photobiology*  
Reviewer *Physics D: Applied Physics*  
Reviewer *PLoS One*  
Reviewer *Proceedings of the National Academy of Science, U.S.A.*  
Reviewer *Review of Scientific Instruments*  
Reviewer *Sensors and Actuators: B. Chemistry*  
Reviewer *Vaccine*

**Book Review:**

Reviewer *Frontiers in Cancer Immunology: Cancer Immunotherapy*, edited (Jianxun Song)  
Bentham Science Publishers (Reviewed, August 2014)

**Grant Review:**

Reviewer 2005, Academic Research Fund Grant, National University of Singapore, Singapore

<i>Reviewer</i>	2003, Arkansas Breast Cancer Research Program University of Arkansas for Medical Sciences, Little Rock, Arkansas
<i>Reviewer</i>	2007, Langston University biotechnology proposal, Langston University, Langston, Oklahoma
<i>Panelist</i>	November 2009, National Science Foundation Review Panel for STEP grants, Washington, DC
<i>Panelist</i>	November 2010, National Science Foundation Review Panel for STEP grants, Washington, DC
<i>Mail Reviewer</i>	December 2009, National Institutes of Health, Vaccines Against Microbial Diseases (VMD) Study Section
<i>Mail Reviewer</i>	December 2010, National Institutes of Health, Vaccines Against Microbial Diseases (VMD) Study Section
<i>Ad hoc Reviewer</i>	March 2010, National Institutes of Health SBIR grant applications in “Development and Translation of Medical Technologies that Reduce Health Disparities (SBIR [R43/R44]”
<i>Reviewer</i>	December 2011, US Fulbright grant applications (Scholars from Taiwan to the US)
<i>Reviewer</i>	February 2012, US Fulbright grant applications (Scholars from the US to Taiwan)
<i>Reviewer</i>	September 2012, US Fulbright grant applications (Scholars from Russia to the US)
<i>Reviewer</i>	October 2012, National Institutes of Health, Special Emphasis Panel (SEP) BST-U(91) – R15 AREA applications (gene/drug delivery and nanotechnology)
<i>Panelist</i>	January 2013, National Science Foundation Review Panel for STEP grants, Washington, DC
<i>Member</i>	July 2014 to June 2017, US Fulbright Scholar Discipline Peer Review Committee - Biomedical Engineering, Council for International Exchange of Scholars (CIES)

## **HONORS AND AWARDS:**

### **International Awards**

Fellow of SPIE- The International Society for Optics and Photonics (SPIE)	
elected 2007	
SPIE Educator Award - The International Society for Optics and Photonics (SPIE)	2012

### **National Awards**

National Institute of Health Summer Fellowship, Dept. of Physics, University of Oklahoma	1991
National Institute of Health Summer Fellowship, University of Oklahoma Health Center	1993
Associated Western University Inc. Faculty Summer Research Fellowship, U. S. Department of Energy, Pittsburgh Energy Technology Center	1995
National Tandy Technology Prize for Science, Mathematics and Computer Science Teaching	1998
Selected as the only Representative from Oklahoma (with Student Abdul Mohamed) to Present Research at “Posters on the Hill” in Washington, DC,	April, 2007
US Professor of the Year (Outstanding Master’s Universities and Colleges Professor of the Year)2008	
Selected as the only Representative from Oklahoma (with Student Henry Le) to Present Research at “Posters on the Hill” in Washington, DC,	April, 2010
2011-2012 US Fulbright Lecturing / Research Award for Taiwan (September 1, 2011 to June 30, 2012)	
Selected as the only Representative from Oklahoma (with Student Cody Bahavar) to Present Research at “Posters on the Hill” in Washington, DC,	April, 2016

**State Awards**

Oklahoma DaVinci Fellows Award, Oklahoma 2006  
Recognized for “High Level Teaching and Quality of Education” by Oklahoma State Senate Resolution No. 47 (52-1-1924), Sponsored by Senator Clark Jolley May 4, 2009  
Selected as the Only Representative from the University of Central Oklahoma (with Student Henry Le) to Present Research at “Research Day at the Capitol” in Oklahoma City, Oklahoma, February, 2010  
Selected as the Only Representative from the University of Central Oklahoma (with Student Kelvin Le) to Present Research at “Research Day at the Capitol” in Oklahoma City, Oklahoma, March, 2011  
Winner of Medal for Excellence in Teaching, Oklahoma Foundation for Excellence (the highest teaching award in Oklahoma) May, 2011

**University Awards**

Research Scholarship, Physics Department, University of Oregon 1983-1988  
Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Oklahoma 2000  
Faculty Research Grants/Publication Award, University of Central Oklahoma 2000  
Faculty Research Grants/Publication Award, University of Central Oklahoma Spring, 2001  
Faculty Research Grants/Publication Award, University of Central Oklahoma Fall, 2001  
Faculty Merit-Credit Award (Teaching Activity Awards), University of Central Oklahoma 2001  
Hauptman Fellowship Award, University of Central Oklahoma 2001  
Sigma Xi Outstanding Research Award, UCO Chapter 2002  
Faculty Research Grants/Publication Award, University of Central Oklahoma Spring, 2002  
Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Oklahoma 2002  
Faculty Research Grants/Publication Award, University of Central Oklahoma Fall, 2002  
Distinguished Scholar Award of The University of Central Oklahoma Chapter of the American Association of University Professors 2003  
Faculty Merit-Credit Award (Teaching Activity Awards), University of Central Oklahoma Fall, 2003  
Faculty Research Grants/Publication Award, University of Central Oklahoma Fall, 2003  
Gold Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Okla. 2004  
Faculty Merit-Credit Award (Service Activity Awards), Univ. of Central Okla. 2005  
Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Okla. 2006  
Faculty Research Grants/Publication Award, University of Central Oklahoma, Spring 2007  
Vanderford Faculty Award in Support of Undergraduate Research, Creative and Scholarly Activities University of Central Oklahoma, August 2007  
Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Okla. 2008  
Neely Excellence in Teaching Award, Univ. of Central Okla. 2009  
Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Okla. 2010  
Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Okla. 2012  
Faculty Merit-Credit Award (Research/Creative Activity Awards), Univ. of Central Okla. 2014  
Inducted to the Inaugural Class of Luminary Society, Univ. of Central Okla. 2015

**PATENTS ISSUED:**

1. Robert E. Nordquist, **Wei R. Chen**, Raoul Carubelli, and Robert L. Adams, “Chitosan-Derived Biomaterials”, United State Patent: 5,747,475 (Issued May 5 1998).

2. Robert E. Nordquist and **Wei R. Chen**, “Laser light delivery method”, United State Patent: 6,099,554 (Issued August 8, 2000).
3. Robert E. Nordquist, Robert L. Adams, **Wei R. Chen**, and Raoul Carubelli, “Cancer Treatment by Photodynamic Therapy, in Combination with an Immunoadjuvant”, Australia Patent: 721276 (Issued October 12, 2000).
4. Robert E. Nordquist, **Wei R. Chen**, and Raoul Carubelli, “Laser/Sensitizer Assisted Immunotherapy”, United State Patent: 6,149,671 (Issued November 21, 2000).
5. Robert E. Nordquist, **Wei R. Chen**, and Raoul Carubelli, “Products in the Treatment of Cancer”, European Patent: 98920235.3-2116 (Issued March 5, 2001).
6. Robert E. Nordquist, **Wei R. Chen**, and Raoul Carubelli, “Laser/Sensitizer Assisted Immunotherapy”, United State Patent: 6,290,712 (Issued September 18, 2001).
7. Robert E. Nordquist, **Wei R. Chen**, and Raoul Carubelli, “Combined physical and immunotherapy for cancer”, United States Patent: 6,316,007 (Issued November 13, 2001).
8. Robert E. Nordquist, **Wei R. Chen**, Raoul Carubelli, and Robert L. Adams, “Cancer Treatment by Photodynamic Therapy, in Combination with an Immunoadjuvant”, Chinese Patent: ZL 961 94438.2 (Issued September 4, 2002).
9. Robert E. Nordquist, **Wei R. Chen**, Raoul Carubelli, and Robert L. Adams, “Cancer Treatment by Photodynamic Therapy in Combination with an Immunoadjuvant”, Japanese Patent: 3929491 (Issued March 23, 2003).
10. Fu-Jen Kao, **Wei R. Chen**, and Shin-Shian Lee, “Light Disinfection Device”, United States Patent: 8,614,426 (Issued December 24, 2013).
11. **Wei R. Chen**, “Immunologically Modified Carbon Nanotubes for Cancer Treatment”, United States Patent: 8,664,198 (Issued March 4, 2014).
12. **Wei R. Chen**, “Immunologically Modified Carbon Nanotubes for Cancer Treatment”, United States Patent: 9,107,944 (Issued August 18, 2015).

**PATENTS PENDING:**

13. **Wei R. Chen**, “Immunologically Modified Carbon Nanotubes for Cancer Treatment”, submitted, 2013, European Union Patent, (Pending). Application No./Patent No.: 12752621.8 - 1651 PCT/US2012027021
14. Robert E. Nordquist, **Wei R. Chen**, Raoul Carubelli, Tomas Hode, Kristopher, Waynant Hamilton, Luciano Alleruzzo, Peter Jenkins, “Chitosan-Derived Biomaterials and Applications Thereof”, submitted, 2011, US Patent, (Pending).
15. **Wei R. Chen**, Feifan Zhou, Zhifang Li, and Hui Li, "A device and a method for imaging-guided photothermal laser therapy for cancer treatment", US Patent, (pending).

**AWARDED RESEARCH GRANTS:**

**AS PRINCIPAL INVESTIGATOR**

1. **Principal Investigator**; “Photodynamic Immunotherapy for Metastatic Mammary Tumors”, \$173,600, May 1, 1996 to April 31, 1997, Xytronyx, Inc., San Diego, California.
2. **Principal Investigator**; “Photodynamic Immunotherapy: GLP Efficacy Studies, Treatment of Prostate Cancer and Immunology Studies”, \$72,050, July 1 1997 to Dec. 31, 1997, Pacific Pharmaceuticals, Inc., San Diego, California.
3. **Principal Investigator**; “Photodynamic Immunotherapy: Treatment of Prostate Cancer, and Immunology Studies II”, \$39,270, April 1, 1998 to July 31, 1998, Pacific Pharmaceuticals, Inc., San Diego, California.

4. **Principal Investigator**; “Laser-Immunotherapy Treatment of Breast Cancer Using Different Immunoadjuvants”, \$9,560, July 2000 to June 2001, University of Central Oklahoma.
5. **Principal Investigator**; “Role of Immunoadjuvants in Photo Dynamic Immuno Therapy”, \$79,168, September 1 2000 to August 31, 2001, Oklahoma Center for the Advancement of Science and Technology (OCAST), \$39,175 OCAST + \$39,993 Industry Matching. (No. AR002-011P)
6. **Principal Investigator**; “Optimization and mechanistic studies of PDIT”, \$583,247, February 1 2001 to January 31, 2004, Oklahoma Center for the Advancement of Science and Technology (OCAST), \$290,315 OCAST + \$292,932 Industry Matching. (No. AP01.1-016)
7. **Principal Investigator**; “Selective laser-photothermal interaction: Monte Carlo simulation and experimental determination of temperature distribution”, \$5,830, July 2001 to June 2002, University of Central Oklahoma.
8. **Principal Investigator**; “Selective Photothermal Tissue Interaction using 805-nm Laser and Indocyanine Green in Tissue Welding”, \$6,095, July 2002 to June 2003, University of Central Oklahoma.
9. **Principal Investigator**; “Immunological and photophysical interactions for cancers”, \$250,958, 07/01/04 to 04/30/06, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE), National Center for Research Resources, National Institute of Health. (No.: P20RR016478-04).
10. **Principal Investigator**; “Evaluation of magnetic forces on superparamagnetic Fe<sub>3</sub>O<sub>4</sub> nanoparticles”, \$4,900, 05/01/06 to 06/01/06, Office of Naval Research (N00014-05-1-0385), subcontract.
11. **Principal Investigator**; Summer Student Program, \$1,500, 05/2006 to 07/2006, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
12. **Principal Investigator**; “MRI-Guided Photoimmunotherapy”, \$261,412, 12/01/06 to 04/30/09, IDeA Networks of Biomedical Research Excellence (INBRE) Grant, National Center for Research Resources, National Institute of Health (NIH). (No.: P20RR016478-06).
13. **Principal Investigator**; Summer Student Program, \$1,500, 05/2008 to 07/2008, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
14. **Principal Investigator**; Summer Student Program, \$2,200, 05/2009 to 07/2009, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
15. **Principal Investigator**; \$10,590/year, 05/2009 to present, College of Mathematics and Science CURE-STEM Scholarship, the University of Central Oklahoma.
16. **Principal Investigator**; “MRI-Guided Photoimmunotherapy”, \$64,040, 05/01/2009 to 04/30/2010, IDeA Networks of Biomedical Research Excellence (INBRE) Grant, National Center for Research Resources, National Institute of Health (NIH). (No.: P20RR016478-09)
17. **Principal Investigator**; “STEM Double Bridge: Connecting High Schools, Community Colleges, and Universities for Tomorrow’s Leaders in Science, Technology, Engineering and Mathematics”, \$1,998,750, 06/01/2009 to 05/31/2014, Science, Technology, Engineering, and Mathematics (STEM) Talent Expansion Program (STEP), National Science Foundation (NSF), (DUE-0856396).
18. **Principal Investigator**; “Support for High School Teachers in Summer Bridge Program”, \$50,000, 06/01/2009 to 05/31/2014, Oklahoma EPSCoR.
19. **Principal Investigator**; “Therapeutic Evaluation of Magnetic Nanoprobes Specific for Malignant Tumor Markers”, \$29,700, 05/01/2010 to 04/30/2011, NIH R21, (2 R21 CA136642-01A1), subcontract.
20. **Principal Investigator**; “Pre-Clinical Investigation of Nitron Anti-Glioma Agent”, \$25,000, 08/01/2009 to 07/31/2010, OCAST OARS (Project No. AR091-053), subcontract.

21. **Principal Investigator**; “Enhancing Laser Immunotherapy for Treatment of Metastatic Tumors by Reducing TGF- $\beta$  Levels in Tumor Microenvironment”, \$63,231, 04/01/2010 to 03/31/2011, IDeA Networks of Biomedical Research Excellence (INBRE) Grant, National Center for Research Resources, National Institute of Health (NIH). (No.: P20RR016478-10).
22. **Principal Investigator**; “Release Time for Curriculum Development or Grant Proposal Development”, \$26,142, 01/2010 to 05/2010, The Oklahoma State Regents for Higher Education.
23. **Principal Investigator**; Summer Student Program, \$2,200, 05/2010 to 07/2010, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
24. **Principal Investigator**; “Interstitial laser immunotherapy for treatment of deep tumors”, \$21,044, 08/10/2010 to 01/31/2011, ImmunoPhotonics, Inc., Columbia, MO.
25. **Principal Investigator**; Equipment grant application, \$15,000, 05/2010 to 10/2010, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
26. **Principal Investigator**; “Laser-Nanotechnology for Cancer Treatment”, \$7,000, 08/01/2011 to 01/31/2012, ImmunoPhotonics, Inc., Columbia, MO.
27. **Principal Investigator**; Summer Student Program, \$2,200, 05/2013 to 07/2013, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
28. **Principal Investigator**; “A Novel Multifunctional Bionanoprobe-Based Phototherapy for Metastatic Cancers”, \$349,596, 08/01/2013 to 07/31/2015, NIH National Institute of Biomedical Imaging and Bioengineering (NIBIB). (No. 1 R21 EB 015509-01-A1).
29. **Principal Investigator**; “Fulbright Visiting Scholar Program for Iraq”, \$117,000, 06/01/2014 to 09/31/2014, Council for International Exchange of Scholars, Institute of International Education.
30. **Principal Investigator**; “Antitumor Effect of Hemp Oil”, \$10,000, 08/01/2014 to 07/31/2016, Earth Science Tech, Inc., Boca Raton, FL.
31. **Principal Investigator**; “Cellular immunological responses induced by glycated chitosan”, \$25,000, 01/01/2015 to 12/31/2016, ImmunoPhotonics, Inc., St. Louis, MO.
32. **Principal Investigator**; “Fulbright Visiting Scholar Program for Iraq”, \$72,500, 06/01/2015 to 09/31/2015, Council for International Exchange of Scholars, Institute of International Education.
33. **Principal Investigator**; Equipment grant application, \$25,000, 05/2015 to 04/2016, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
34. **Principal Investigator**; Summer Student Program, \$2,200, 05/2015 to 07/2015, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
35. **Principal Investigator**; Conference Travel Grant, \$2,000, 01/2016 to 07/2016, Institutional Development Award (IDeA) Networks of Biomedical Research Excellence (INBRE).
36. **Principal Investigator**; “Effects of interstitial inCVAX for the treatment of metastatic tumors in rats”, \$71,000, 09/2015 to 12/2016, BioGenerator, St. Louis, MO.

#### **AS CO-PRINCIPAL INVESTIGATOR**

1. **Co-Principal Investigator**; “Laser Immunotherapy for the Treatment of Cancer in Man and Animals”; \$39,970 (direct cost); June 1998 to May 1999; Puterbaugh Foundation, McAlester, Oklahoma.
2. **Co-Principal Investigator**; “Photodynamic therapy and photothermal coagulation for selective treatment of cancer and other pathologic conditions”, \$225,000 (direct cost); June 1999 to May 2001; Presbyterian Foundation, McAlester, Oklahoma.

3. **Co-Principal Investigator**; “Laser Immunotherapy in Treatment of Metastatic Prostate Tumors”, \$9,932 (direct cost); July 1999, to June 2000; University of Central Oklahoma.
4. **Co-Principal Investigator**; “Phase I clinical trial of chromophore-enhanced laser-induced hyperthermia”, \$36,575, (direct cost); January 2001 to December 2001; Barbour Foundation, Oklahoma.
5. **Co-Principal Investigator**; “Mechanisms of low intensity laser irradiation stimulation of wound healing”, \$134,488, (direct cost); 7/01/02 to 6/30/05, Oklahoma Center for the Advancement of Science and Technology (OCAST HR02-153RS).
6. **Co-Principal Investigator**; “Indocyanine Green and Immunoadjuvant in Selective Hyperthermia for Treatment of Mouse Melanoma”, \$19,036, (direct cost); 06/01/03 to 12/31/03, Barbour Foundation, Oklahoma.
7. **Co-Principal Investigator**; “Photodynamic Therapy in Combination with Chemotherapy and Immunotherapy for Treatment of Metastatic Mammary Rat Tumors”, \$26,998 (direct cost); 06/01/03 to 12/31/03, Kleberg Foundation, Oklahoma.
8. **Co-Principal Investigator**; “A dual detector technique for x-ray attenuation and phase imaging”, \$1,782,908, 10/01/2003 to 09/30/2007, National Institute of Health (NIH/NIBIB) (No.: R01 EB002604).
9. **Co-Principal Investigator**; “Phase contrast x-ray imaging with a field emission source”, \$1,672,013, 12/1/2003-11/30/2007, National Institute of Health (NIH/NCI) (No.: R01 CA104773).
10. **Co-Principal Investigator**; “Center for Undergraduate Research & Education Student Scholars in Science, Technology, Engineering, and Mathematics”, \$600,000, 06/01/2010 to 05/31/2015, S-STEM Program, National Science Foundation (NSF), (DUE-0965864).

#### **EDUCATION PROGRAMS PROPOSED AND DEVELOPED:**

1. Biomedical Engineering undergraduate degree program (University of Central Oklahoma)  
Developed: 1999 to 2000  
Proposed: fall, 2000  
Approved: December 2000, by Oklahoma State Regents for Higher Education

#### **COURSES PROPOSED:**

1. Principle of Biomedical Engineering I (University of Central Oklahoma), Fall, 2000
2. Principle of Biomedical Engineering II (University of Central Oklahoma), Fall, 2000

#### **COURSES DEVELOPED:**

1. Medical Physics (University of Central Oklahoma), 1996 and 1997 (revised and developed)
2. Medical Physics Lab (University of Central Oklahoma), 1996 and 1997 (revised and developed)
3. Modern Physics Lab (University of Central Oklahoma), Fall 1999 and 2000
4. Principle of Biomedical Engineering I (University of Central Oklahoma), Fall, 2002
5. Principle of Biomedical Engineering II (University of Central Oklahoma), Spring, 2003

#### **COURSES TAUGHT:**

1. Physical Science
2. General Physics
3. Engineering Physics
4. General Physics I
5. Mechanics (calculus based)

6. Electricity and Magnetism (calculus based)
7. Modern Physics
8. Modern Physics Lab
9. Introduction to Modern Physics
10. Modern Physics II
11. Mathematics (Algebra for college freshmen)
12. Medical Physics
13. Medical Physics Lab
14. Semiconductor (Graduate Course)
15. Mathematical Physics I
16. Quantum Mechanics
17. Principles of Biomedical Engineering I
18. Principles of Biomedical Engineering II
19. Biomedical Imaging
20. Classical Mechanics
21. Electromagnetic Fields II