International Union of Toxicology

PROPOSAL TO THE NOMINATING COMMITTEE:
MEMBERS SUITABLE FOR NOMINATION TO THE IUTOX EXECUTIVE COMMITTEE FOR THE PERIOD 2019-2022

Proposal due to Barbara Hales at the IUTOX Secretariat by: **November 19, 2018**
Please include a short CV for the nominee

PROPOSAL SUBMITTED BY

Member Society: Society of Toxicology

Name and signature of IUTOX Member Society representative submitting nomination: Patricia E. Ganey

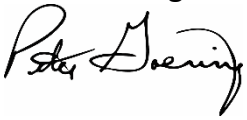
Position: SOT Past President/IUTOX Councilor

Signature: 

Date: October 22, 2018

BIOGRAPHICAL DETAILS OF PROPOSED CANDIDATE

Name and signature of proposed candidate: Peter L. Goering



Nomination for officer or director may be indicated: IUTOX Director

Date of Birth: May 23, 1955

Current Position: Senior Biomedical Research Scientist; Deputy Director, Division of Biology, Chemistry, and Materials Science, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, Food and Drug Administration, Silver Spring, Maryland

Address:
US Food and Drug Administration
Center for Devices and Radiological Health
10903 New Hampshire Ave
White Oak Bldg. 64, Rm 4078
Silver Spring, Maryland 20993

Nationality: USA

Scientific Field: Toxicology

Education:
Kansas University Medical Center, PhD, Toxicology, 1984; Bethel College (KS), BA, Biological Sciences, 1977.

Professional positions held (with dates):

Postdoctoral Fellowship, National Research Service Award, National Institute of Environmental Health Sciences, NIH, Research Triangle Park, North Carolina (1983-1986)

Research Toxicologist, Center for Devices and Radiological Health, Food and Drug Administration, Silver Spring, Maryland (1986-2015)

Senior Biomedical Research Scientist; Deputy Director, Division of Biology, Chemistry, and Materials Science, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, Food and Drug Administration, Silver Spring, Maryland (2016-present)

IUTOX positions held (with dates):

IUTOX CTDC-IX International Advisory Committee 2014-2015
IUTOX Councilor 2016-2019
IUTOX Auditor 2016

Member Society positions held (with dates):

SOT Past President 2015-2016, SOT President 2015-2016, SOT Vice President 2014-2015, SOT Vice President-Elect 2013-2014; Secretary-Elect 2009–2010, Secretary 2010–2012; Nominating Committee Chair 2017-2018, Member 2004–2006; Nominating Committee for Honorary Members Chair 2016-2017

SOT Communiqué Newsletter Editor 2010–2012; ATSDR/NCEH/CDC Government Liaison Group 2010–present, Chair 2010–2012; Communications Committee Council Contact 2009–2012; Council Subcommittee for Non-SOT Meeting, Component, and Global Funding 2009–2012; Council Subcommittee for Regional Chapter Funding

2009–2010; Regional Chapters Council Contact 2009–2011; Historian, Council Contact 2009–2012; NIOSH Government Liaison Group 2010–present; SOT Scientific Program Committee 1992–1995; Regulatory Affairs and Legislative Assistance Committee 2003–2006, Chair 2004–2006; National Capital Area Regional Chapter 1987–present, Vice President 1999–2000, President 2000–2001, Past President 2001–2002; Hispanic Organization of Toxicologists Special Interest Group 2010–present; Women in Toxicology Special Interest Group 2010–present; Medical Device Specialty Section 2010–present; Metals Specialty Section 1986–present, Councilor 1992–1994, Vice President-Elect 1996–1997, Vice President 1997–1998, President 1998–1999, Past President 1999–2000; Nanotoxicology Specialty Section 2007–present.

ICTXV Continuing Education Committee 2017-present; ICTXV Scientific Program Committee Co-chair 2017-present; SOT Representative to FASEB Science Research Conferences Advisory Committee 2017-present

Professional memberships and/or awards:

Society of Toxicology, Member 1983-present
American Board of Toxicology, Diplomate 1994-present
Academy of Toxicology Sciences, Fellow 2006-present

Academy of Toxicological Sciences: Councilor 2008-2009, Treasurer 2009-2012, Vice President 2012-2013, President 2013-2014, Past President 2014-2015.

FDA Scientific Achievement - Lifetime Achievement Award. *For sustained, outstanding contributions and exemplary leadership in toxicology to improve the safety assessment of FDA regulated products.* (2017)

FDA Office of the Commissioner, Office of Science and Health Coordination - Collaborative Science Project Grant. "Development of an Improved Animal Model of Subclinical Renal Failure and Improved Biomarkers of Nephrotoxicity". Co-PI – Ron Brown. (2001)

FDA Office of Women's Health grant. "Development of urinary and serum biomarker of kidney damage in patients with systemic lupus erythematous nephtitis". Co-PI – Ron Brown. (2009)

FDA Chief Scientist Challenge Grant. "Biomarkers of early detection of kidney damage in hypertension". Co-PI – Ron Brown, CDRH. (2009)

FDA Office of Women's Health grant. "Safety and Efficacy of Iron Oxide Nanoparticles Used as MRI Contrast Agents for Breast Cancer Imaging". (2012)

FDA Office of the Chief Scientist NanoCORES grant. "Biological evaluation and safety assessment of FDA regulated products with nanoengineered surfaces". (2012)

CURRICULUM VITAE
July 2018

Name: **Peter L. Goering, Ph.D.**

Present Address: Food and Drug Administration
Center for Devices and Radiological Health
10903 New Hampshire Ave
White Oak Bldg 64, Rm 4064
Silver Spring, Maryland 20993
Phone: (301) 796-0253
E-mail: peter.goering@fda.hhs.gov

Education

1977 B.A., Natural Sciences, Bethel College, North Newton, Kansas
1983 Ph.D., Toxicology, University of Kansas Medical Center, Kansas City, Kansas

Advisor: Dr. Curtis D. Klaassen
Dissertation Title: Mechanism of Tolerance to Acute Cadmium Toxicity

Professional Experience

1983 - 1986 Post-doctoral Fellowship, National Research Service Award, National Institute of Environmental Health Sciences, NIH, Research Triangle Park, North Carolina

1986 - 2015 Research Toxicologist, Center for Devices and Radiological Health, Food and Drug Administration, Silver Spring, Maryland

2016 – Present Senior Biomedical Research Scientist; Deputy Director, Division of Biology, Chemistry, and Materials Science, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, Food and Drug Administration, Silver Spring, Maryland

Board Certifications

1994 - Present Diplomate, American Board of Toxicology
(re-certification – 1999; 2004; 2009; 2014)

2006 Elected as Fellow, Academy of Toxicological Sciences
(re-certification – 2011; 2016)

Academic Appointments

1990 - 2016	Adjunct Professor, Program in Toxicology, University of Maryland at Baltimore
2001 - 2016	Adjunct Associate Professor, Department of Biological Sciences, The George Washington University, Washington, DC

Research Funding Awards

2001	FDA Office of the Commissioner, Office of Science and Health Coordination - Collaborative Science Project. "Development of an Improved Animal Model of Subclinical Renal Failure and Improved Biomarkers of Nephrotoxicity". Co-PI – Ron Brown. One year - $134,100.
2009	FDA Office of Women's Health grant. "Development of urinary and serum biomarker of kidney damage in patients with systemic lupus erythematous nephtitis". Co-PI – Ron Brown. Two years - $201,002.
2009	FDA Chief Scientist Challenge Grant. "Biomarkers of early detection of kidney damage in hypertension". Co-PI – Ron Brown, CDRH. One year - $132,000.
2012	FDA Office of Women's Health grant. "Safety and Efficacy of Iron Oxide Nanoparticles Used as MRI Contrast Agents for Breast Cancer Imaging". One year - $55,000. Co-PI – Qin Zhang, CDRH.
2012	FDA Office of the Chief Scientist NanoCORES grant. "Biological evaluation and safety assessment of FDA regulated products with nanoengineered surfaces". One year - $120,000. One of four Co-PIs.

Society Memberships

1984 - present	Society of Toxicology
1987 - present	National Capital Area Chapter – Society of Toxicology

Activities in Professional Societies

1992-1994	Elected Councilor, Metals Specialty Section, Society of Toxicology

1992-1995 Appointed to the Scientific Program Committee, Society of Toxicology

1995 Nominated for Membership Committee, Society of Toxicology

1996-2000 Elected to four-year leadership position (Vice-president elect, Vice president, President, and Past-president), Metals Specialty Section, Society of Toxicology

1998-1999 Chair, Student Travel Awards Committee, National Capital Area Regional Chapter – Society of Toxicology

1999-2001 Elected to two-year leadership position (Vice-President, President), National Capital Area Regional Chapter – Society of Toxicology

2003-2006 Appointed to the Regulatory Affairs and Legislative Assistance (RALA) Committee, Society of Toxicology. Appointed Chairman for 2004-2006.

2004-2006 Elected to the Nominating Committee, Society of Toxicology.

2009-2012 Elected to three-year leadership position on the Council (Secretary), Society of Toxicology.

2009-2012 Elected to three-year leadership position on the Executive Committee (Secretary), Academy of Toxicological Sciences.

2012-2015 Elected to three-year leadership position (Vice-President, President, Past-President), Academy of Toxicological Sciences.

2013-2017 Elected to the four-year "Presidential Chain", Society of Toxicology. Served as President 2015-2016. The SOT is the largest global scholarly and professional organization in toxicology, with over 8000 member scientists from academia, private sector, and government who practice toxicology in the U.S. and abroad. SOT promotes the scientific discipline of toxicology and its role in protecting human and environmental health.

2016-2017 Appointed to chair the Nominating Committee for Honorary Members, Society of Toxicology.

Scientific advisory committees for international meetings (most recent)

2014 - 2015 Appointed to International Advisory Committee, Ninth Congress of Toxicology in Developing Countries (CTDC-IX), Natal, Brazil, November 7-10, 2015.

2015 - 2019 Co-chair, Scientific Program Committee, and Chair, CE Committee, International Congress of Toxicology, International Union of Toxicology (IUTOX); Honolulu, HI, 2019.

Editorial Boards

1995-2000 *Fundamental and Applied Toxicology*

2000- present *Toxicological Sciences* (ranked 4th highest impact factor among 70 toxicology journals)

Invited referee of research manuscripts (average total ~10 per year) for:

Toxicological Sciences
Nanomedicine
Toxicology and Applied Pharmacology
Molecular Nutrition & Food Research
J. Pharmacology and Experimental Therapeutics
Neurotoxicology
J. Toxicology and Environmental Health
Canadian J. of Physiology and Pharmacology
Cell Biology and Toxicology
Experimental Cell Research
Chemico-Biological Interactions
ACS Nano
Chemical Research in Toxicology
Critical Reviews in Toxicology
Nanotoxicology
J. Biochemical Toxicology
Environmental Research
Cancer Research

Invited Presentations (most recent)

Nanotechnology for Defense Conference, invited presentation "What We Know and Don't Know about the Biological Effect of Nanomaterials: Developing Experimental Approaches for Safety Assessment", Atlanta, GA, May 4, 2010.

Purdue University School of Health Sciences, invited seminar "What We Know and Don't Know about the Biological Effect of Nanomaterials: Challenges in Developing Experimental Approaches for Safety Assessment", West Lafayette, IN, Sept 29, 2010.

Toxicology and Risk Assessment Conference, New Methods and New Hazards in Toxicology and Risk Assessment, invited presentation "Comparison of cytotoxicity and inflammatory responses to nanomaterials in cultured macrophages", Cincinnati, OH, April 26, 2011. [Unable to attend due to threat of U.S. government shutdown – April 2011; a colleague made presentation]

Penn State University, Undergraduate Biomedical Sciences Conference, invited seminar "Protecting and Promoting the Health of the Public: Practicing Toxicology at the U.S. Food and Drug Administration", State College, PA, March 24, 2012.

Hanyang University, Department of Bionano Engineering, invited seminar "Distribution of intravenously-injected silver nanoparticles in pregnant mice and embryos", Seoul, South Korea, July 4, 2013.

Ninth Congress of Toxicology in Developing Countries (CTDC-IX), invited speaker "Effects of immobilized surface nanostructures on tissue-material interactions" – Symposium "New Solutions for Risk Assessment of Engineered Nanomaterials", Natal, Brazil, November 8, 2015.

Oklahoma State University, Department of Physiological Sciences; invited speaker for 17th Annual Sitlington Endowed Lecture in Toxicology. "In Vitro Tissue-Materials Interactions Assessment of Nanostructured Surfaces for Medical Device Applications"; Stillwater, OK, January 27, 2016.

Society of Toxicology Annual Meeting, invited speaker "Distribution and accumulation of silver nanoparticles in maternal tissues and visceral yolk sac of pregnant mice, and a potential effect on embryo growth"; Workshop on *Maternal Exposure to Nanoparticles—How Does It Affect the Fetus? Status, Mechanisms, and Future Directions*; New Orleans, Louisiana, March 15, 2016.

Global Summit on Regulatory Science (GSRS16): Nanotechnology Standards and Applications, invited speaker "Physico-chemical and biological evaluation of immobilized surface nanostructures". Session 4 - Advances in Nanotechnology-Derived Medical Devices. Bethesda, Maryland, September 8, 2016.

US Army Public Health Command, Toxicology Directorate, invited seminar. "Physico-chemical and biological evaluation of immobilized surface nanostructures". Aberdeen Proving Ground, Aberdeen, Maryland, October 26, 2016.

Doctoral dissertation committees (most recent)

2009-2012	Member and research co-mentor, Doctoral Dissertation Committee for **Carlye Austin**, The George Washington University, Department of Biological Sciences, Washington, DC; defended December 5, 2012. (student of Dr. Ken Brown).
2011-2015	Member and research co-mentor, Doctoral Dissertation Committee for **Peter E. Petrochenko**, Joint Department of Biomedical Engineering, UNC-Chapel Hill/NC State University; defended October 20, 2014. (student of Dr. Roger Narayan).

2012-2015	Member and research co-mentor, Doctoral Dissertation Committee for **Shelby A. Skoog**, Joint Department of Biomedical Engineering, UNC-Chapel Hill/NC State University; defended July 27, 2015. (student of Dr. Roger Narayan).
2015-present	Member and research co-mentor, Doctoral Dissertation Committee for **Alexander Nguyen**, Joint Department of Biomedical Engineering, UNC-Chapel Hill/NC State University. (student of Dr. Roger Narayan).

Postdoctoral Fellows mentored at USFDA:

2001-2004	Emily Madden, PhD
2006-2008	Yuzhao Zhou, PhD
2010-2012	Martha Betz, PhD.; USFDA Commissioner's Fellow
2010-2013	Bridget Wildt, PhD
2013-2014	Amber Nagy, PhD
2014-2015	Rene Vinas, PhD
2015-2016	Kausar Riaz-Ahmed, PhD
2016-2018	Laura Savery, PhD (co-mentor)
2016-present	Teresa Palacios, PhD
2015-present	Bhaskara Chikkaveeraiah, PhD

Publications (most recent of 91 total)

Hoffmann D, Krishnamoorthy A, Bijol V, Ramizez Gonzalez V, Frendl G, Waikar S, Zhang Q, Brown RP, **Goering PL** and Vaidya VV. Fibrinogen excretion in the urine and immunoreactivity in the kidney serves as translational biomarker for acute kidney injury. *Amer. J. Pathol.* 181(3):818-828, 2012.

Saikumar J, Hoffmann D, Kim TM, Ramirez Gonzalez V, Zhang Q, **Goering PL**, Brown RP, Bijol V, Park PJ, Waikar SS and Vaidya VV. Expression, circulation and excretion profile of microRNA-21, -155, and -18a following acute kidney injury. Toxicol. Sci. 129(2):256-267, 2012.

Petrochenko PE, Scarel G, Hyde GK, Parsons GN, Skoog S, Zhang Q, **Goering PL** and Narayan RJ. Prevention of UV-induced surface damage and cytotoxicity of polyethersulfone using ALD titanium dioxide. JOM (Journal of The Minerals, Metals & Materials Society) 65(4):550-556, 2013.

Petrochenko PE, Skoog S, Zhang Q, Elam JW, Comstock DJ, **Goering PL** and Narayan RJ. Cytotoxicity of cultured macrophages exposed to antimicrobial zinc oxide coatings on nanoporous aluminum oxide membranes. Biomatter 3(3) July-Sept: (e-pub online DOI: https://dx.doi.org/ 10.4161/biom.25528), 2013.

Zhang Q, Davis KJ, Hoffmann D, Vaidya VS, Brown RP and **Goering PL**. Urinary biomarkers track the progression of nephropathy in hypertensive and obese rats. Biomarkers in Medicine 8(1):85-94, 2014.

Skoog SA, **Goering PL** and Narayan RJ. Stereolithography in tissue engineering. J Materials Science: Materials in Medicine 25(3):845-856, 2014. (DOI) 10.1007/s10856-013-5107-y [review article].

Skoog SA, Nguyen AK, Kumar G, Zheng J, **Goering PL**, Koroleva A, Chichkov BN and Narayan RJ. Two-photon polymerization of 3-D zirconium oxide hybrid scaffolds for long-term stem cell growth. Biointerphases 9(2):1-7, June, 2014. (DOI: http://dx.doi.org/10.1116/1.4873688).

Petrochenko PE, Zhang Q, Skoog S, Chunming J, Narayan RJ and **Goering PL**. Cytotoxic evaluation of nanostructured zinc oxide (ZnO) thin films and leachates. Toxicol. In Vitro 28:1144-1152, 2014. (DOI: http://10.1016/dx.doi.org/10.1016/j.tiv.2014.05.004).

Petrochenko PE, Torgersen J, Gruber P, Hicks L, Zheng J, Kumar G, Narayan RJ, **Goering PL**, Liska R, Stampfl J and Ovsianikov A. Laser 3D printing with sub-microscale resolution of porous elastomeric scaffolds for supporting human bone stem cells. Advanced Healthcare Materials 4(5):739-747, 2015. doi: 10.1002/adhm.201400442.

Petrochenko PE, Kumar G, Fu W, Zhang Q, Zheng J, Liang C, **Goering PL** and Narayan RJ. Nanoporous aluminum oxide membranes coated with atomic layer deposition-grown titanium dioxide for biomedical applications: an in vitro evaluation. J. Biomed. Nanotechnol. 11(12):2275-2285, 2015.

Kumar G, Degheidy H, Casey BJ and **Goering PL**. Flow cytometry evaluation of in vitro cell necrosis and apoptosis induced by silver nanoparticles. Food and Chem Toxicol 85:45-51, 2015. doi:10.1016/j.fct.2015.06.012.

Zhang Q, Rajan SS, Tyner KM, Casey BJ, Dugard CK, Jones Y, Paredes AM, Clingman CS, Howard PC and **Goering PL**. Effects of iron oxide nanoparticles on biological responses and MR imaging properties in human mammary healthy and breast cancer epithelial cells. J Biomed Materials Res: Part B - Appl Biomaterials 104(5):1032-1042, 2016. doi: 10.1002/jbm.b.33450.

Austin CA, Hinkley GK, Zhang Q, Umbreit TH, Betz MW, Wildt BE, Mishra A, Casey BJ, Francke-Carroll S, Hussain SM, Roberts SM, Brown KM and **Goering PL**. Distribution and accumulation of 10 nm silver nanoparticles in maternal tissues and visceral yolk sac of pregnant mice, and a potential effect on embryo growth. Nanotoxicology 10:654-661, 2016. http://dx.doi.org/10.3109/17435390.2015.1107143

Wildt BE, Celedon A, Maurer EI, Casey BJ, Nagy A, Hussain SM, and **Goering PL**. Intracellular accumulation and dissolution of silver nanoparticles in L-929 fibroblast Cells using live cell time-lapse microscopy. Nanotoxicology 10(6):710-719, 2016. DOI: 10.3109/17435390.2015.1113321.

Mishra A, Zheng J, Tang X and **Goering PL**. Silver nanoparticle-induced autophagic-lysosomal disruption and NLRP3-inflammasome activation in HepG2 cells is size-dependent. Toxicol Sciences 150(2):473-487, 2016. doi: 10.1093/toxsci/kfw011.

Skoog SA, Kumar G, **Goering PL**, Williams B, Stiglich J and Narayan RJ. Biological response of human bone marrow-derived mesenchymal stem cells to commercial tantalum coatings with microscale and nanoscale surface topographies. JOM (Journal of The Minerals, Metals & Materials Society) E-pub ahead of print – May 2016. DOI: 10.1007/s11837-016-1934-x.

Skoog SA, Kumar G, Zheng J, Sumant AV, **Goering PL** and Narayan RJ. Biological evaluation of ultrananocrystalline and nanocrystalline diamond coatings. J Materials Sci: Materials in Medicine 27:187-200, 2016. DOI: 10.1007/s10856-016-5798-y.

Riaz Ahmed KB, Nagy AM, Brown RP, Zhang Q, Malghan SG and **Goering PL**. Silver nanoparticles: significance of physicochemical properties and assay interference on the interpretation of in vitro cytotoxicity studies. Toxicology In Vitro 38:179-192, 2017. DOI: 10.1016/j.tiv.2016.10.012.

Skoog SA, Lu Q, Malinauskas RA, Sumant AV, Zheng J, **Goering PL**, Narayan RJ and Casey BJ. Effects of nanotopography on the in vitro hemocompatibility evaluation of nanocrystalline diamond coatings. J Biomed Materials Res: Part A 105(1):253-264, 2017. doi: 10.1002/jbm.a.35872.

Savery LC, Viñas R, Nagy AM, Pradeep P, Merrill SJ, Hood AM, Malghan S, **Goering PL** and Brown RP. Deriving a provisional tolerable intake for intravenous exposure to silver nanoparticles released from medical devices. Regulatory Toxicol Pharmacol 85:108-118, 2017.

Weaver JL, Tobin GA, Ingle T, Bancos S, Stevens D, Rouse R, Howard K, Goodwin D, Knapton A, Li X, Shea K, Stewart S, Xu L, **Goering PL**, Zhang Q, Howard P, Collins J, Khan S, Sung K and Tyner KM. Evaluating the potential of durable gold, silver, and silica nanoparticles to saturate mononuclear phagocytic system tissues under repeat dosing conditions. (accepted: Particle and Fibre Toxicol 14(1):25, doi: 10.1186/s12989-017-0206-4; July 2017). Impact Factor = 8.6.

Petrochenko PE, Zheng J, Casey BJ, Bayati R, Narayan RJ and **Goering PL**. Pulse laser deposited nanosilver-PMMA composite coating optimized to provide robust antimicrobial efficacy while minimizing human bone stem cell toxicity. Toxicol In Vitro 44:248-255, 2017.

Khan S, Zhang Q, Marasa B, Sung K, Cerniglia C, Ingle T, Jones Y, Paredes A, Tobin G, Bancos S, Weaver J, **Goering PL**, Howard P, Patri A and Tyner KM. Investigating the susceptibility of mice to a bacterial challenge after intravenous exposure to durable nanoparticles. Nanomedicine 12(17):2097-2111, 2017. doi: 10.2217/nnm-2017-0176.

Skoog SA, Kumar G, Narayan RJ and **Goering PL**. Biological responses to immobilized microscale and nanoscale surface topographies. Invited Review. Pharmacology and Therapeutics 182:33-55, 2018. (doi: 10.1016/j.pharmthera.2017.07.009, June 2017). Impact Factor = 11.1.

Yang K-H, Nguyen AK, **Goering PL**, Sumant AV and Narayan RJ. Ultrananocrystalline diamond coated nanoporous membranes support SK-N-SH neuroblastoma endothelial cell attachment. Interface Focus 8(3):20170063, 2018. doi: 10.1098/rsfs.2017.0063. Epub 2018 Apr 20. (Interface Focus is the the Royal Society's cross-disciplinary themed publication promoting research at the interface between the physical and life sciences).

Abstracts for presentations at scientific meetings (most recent of 114 total)

Goering PL. Distribution and accumulation of 10nm silver nanoparticles in maternal tissues and visceral yolk sac of pregnant mice, and a potential effect on embryo growth. The Toxicologist 150(1):182, 2016 - Society of Toxicology, 55th Annual Meeting, New Orleans, LA, March 13-17, 2016. (Invited talk).

Skoog SA, Goering PL and Narayan RJ. Strategies for stereolithography-based fabrication and toxicity evaluation of 3-D polymer scaffolds for tissue engineering. The Toxicologist 150(1):548, 2016 - Society of Toxicology, 55th Annual Meeting, New Orleans, LA, March 13-17, 2016. (Invited talk).

Petrochenko PE, Gruber P, Markovic M, Liska R, Stampfl J, Goering PL, Narayan RJ and Ovsianikov A. Real time laser 3D printing of living cells in hydrogels with two photon polymerization by minimizing chemical, free radical, and phototoxicity. The Toxicologist 150(1):343, 2016 - Society of Toxicology, 55th Annual Meeting, New Orleans, LA, March 13-17, 2016.

Riaz Ahmed K, Nagy A, Malghan S, Goering P and Brown R. Dosimetry for silver nanoparticle exposure in vitro. The Toxicologist 150(1):404, 2016 - Society of Toxicology, 55th Annual Meeting, New Orleans, LA, March 13-17, 2016.

Mishra A, Kumar G and Goering PL. Silver nanoparticles induce pyroptosis by NLRP3-inflammasome-dependent caspase-1 activation in macrophages. The Toxicologist 150(1):414, 2016 - Society of Toxicology, 55th Annual Meeting, New Orleans, LA, March 13-17, 2016.

Nguyen A, Patel R, Casey BJ, Goering PL, Narayan R and Kumar G. Effect of acute and chronic silver nanoparticle (AgNP) exposure on osteogenic differentiation of human bone marrow stromal cells (hBMSCs). The Toxicologist 150(1):414, 2016 - Society of Toxicology, 55th Annual Meeting, New Orleans, LA, March 13-17, 2016.

Chikkaveeraiah BV, Goering PL, Malghan S. Understanding physico-chemical properties of nanomaterials- An important aspect of Regulatory Science for nano-enabled medical products. Global Summit on Regulatory Science (GSRS16) Nanotechnology Standards and Applications, National Institutes of Health, Bethesda, Sep 7-9, 2016.

Nguyen AK, Jaipan P, Jameson J, Brittain S, Kaiser A, Lo L, Moreno J, Narayan RJ, Goering PL and Kumar G. Effect of simulated body fluid formulation on bioactivity. Annual Meeting of TERMIS (Tissue Engineering and Regenerative Medicine), San Diego, CA, Dec 11-14, 2016.

Leissa JA, Nguyen AK, Mishra A, Zheng J, Wu Y, Goering PL and Kumar G. Evaluation of the skin irritation potential of silver nanoparticles using the epiderm™ skin irritation test. The Toxicologist 156(1):273, 2017 - Society of Toxicology, 56th Annual Meeting, Baltimore, MD, March 12-16, 2017.

Nguyen AK, Goering PL and Narayan RJ. Cytotoxicity of water soluble type-2 photoinitiators for two-photon polymerization. The Toxicologist 156(1):271, 2017 - Society of Toxicology, 56th Annual Meeting, Baltimore, MD, March 12-16, 2017.

Palacios-Hernandez T, Kumar G, Nguyen AK, Petrochenko PE, Wu Y, Phillips KS, Skoog SA, Sussman EM, Zheng J, Tang X and Goering PL. In vitro toxicological evaluation of ultrasmall superparamagnetic iron oxide nanoparticles on human coronary artery endothelial cells. The Toxicologist (Late Breaking Supplement, p. 147) - Society of Toxicology, 56th Annual Meeting, Baltimore, MD, March 12-16, 2017.

Savery LC, Viñas R, Nagy AM, Pradeep P, Merrill SJ, Hood AM, Malghan S, Goering PL and Brown RP. Deriving a provisional tolerable intake for intravenous exposure to nanoparticles released from medical devices. The Toxicologist 156(1):448, 2017 - Society of Toxicology, 56th Annual Meeting, Baltimore, MD, March 12-16, 2017.

Petrochenko PE, Zheng J, Casey BJ, Narayan RJ and Goering PL. Pulsed laser deposited composite PMMA and nanosilver thin film device coating optimized to prevent bacterial colonization and support bone stem cell growth. The Toxicologist 156(1):269, 2017 - Society of Toxicology, 56th Annual Meeting, Baltimore, MD, March 12-16, 2017.

Nguyen AK, Goering PL, Sarkar Das S and Narayan RJ. Cytotoxicity of a lithium phenyl(2,4,6-trimethylbenzoyl)phosphinate (LAP) and gelatin methacryloyl (GelMA) hydrogel in human kidney primary proximal tubule cells (hRPTEC). The Toxicologist 162(1):280, 2018 - Society of Toxicology, 57th Annual Meeting, San Antonio, TX, March 11-15, 2018.

Palacios-Hernandez T, Nguyen AK, Skoog SA, Sussman EM, Wu Y, Zheng J, Tang X and Goering PL. Evaluation of mechanism of toxicity of ultrasmall superparamagnetic iron oxide nanoparticles on human coronary artery endothelial cells. The Toxicologist 162(1):415, 2018 - Society of Toxicology, 57th Annual Meeting, San Antonio, TX, March 11-15, 2018.

Book Chapters (most recent of 23 total)

Goering PL and Liu J. Hepatotoxicity of copper, iron, cadmium and arsenic. In *Comprehensive Toxicology, 3nd Ed.*, (McQueen CA, ed.), Elsevier Science, London. Vol. 2, Chapt. 23, pp. 576-596, 2018.