

Application Form**Profile****Office Use Only:**☒ Ward 2**Which Boards would you like to apply for?**

Board of Public Utilities: Submitted

Ms./Mr.

Mr.

Brian

First Name

D.

Middle Initial

Siana

Last Name

Home Address

Suite or Apt

Riverside

City

CA

State

Postal Code

Primary Phone

Alternate Phone

Email Address

University of California, Riverside

Employer

Associate Professor of Physics
and Astronomy

Job Title

Business Address**Business Phone****Length of residence in City of Riverside**

10 years

Are you a registered voter of the City of Riverside?☒ Yes ☐ No

Have you ever been convicted of a crime of moral turpitude?

☐ Yes ☒ No

Do you have adequate time to serve?

☒ Yes ☐ No

*Eligibility requirements per City Charter Article VIII Section 805.

Applications may be screened on the basis of information submitted with this form.

You are welcome to provide a resume and/or letters of endorsement.

Interests & Experiences

WHY YOU WANT TO SERVE ON A CITY BOARD OR COMMISSION:

I am deeply interested in resource use and environmental sustainability. I am especially interested in the rapid transition that utilities are undertaking to carbon neutral energy sources as mandated by CA law. I think there are incredible opportunities for Riverside that can be beneficial both to ratepayers and to the environment. I am also interested in water use and conservation as well as waste management. As Associate Faculty Director of Sustainability at UCR, I have been involved with monitoring our energy, water and waste and making decisions about investments and conservation, and coordinating efforts with the City of Riverside and RPU.

EXPERIENCE OR SPECIAL KNOWLEDGE PERTAINING TO AREA(S) OF INTEREST:

I have a B.S. in Applied and Engineering Physics and a PhD in Physics. I teach a popular, large (400+ student) course at UC Riverside on energy and the environment, which covers how we use energy, sources of energy, and the environmental impacts of each source. I am the Associate Faculty Director of Sustainability at UC Riverside, a new role at UCR that began in 2018. In this role, I am coordinating sustainability outreach, curriculum, and research on the UCR campus. This has included monthly or quarterly discussions and collaborations with the City of Riverside and Riverside Public Utilities, most recently with the Riverside Green Summit in Oct. 2019. This has also included working toward the University of California's carbon neutrality by 2025 initiative. Finally, I am the chair of the sustainability working group for UCR's long range development plan, which determines how they can appropriately use physical space, infrastructure and resources in the next 15 years. This has included engagement with stakeholders in the community.

EDUCATIONAL BACKGROUND:

B.S. Applied and Engineering Physics, Cornell University (1999) Ph.D. Physics, University of California, San Diego (2005)

OCCUPATIONAL EXPERIENCE:

Postdoctoral Scholar, Infrared Processing and Analysis Center, Caltech (2005-2008) Postdoctoral Scholar, Astronomy Department, Caltech (2008-2011) Assistant Professor, Physics Dept, UCR (2011-2017) Associate Professor, Physics Dept, UCR (2017-) Associate Faculty Director of Sustainability (2018-)

PROFESSIONAL OR TECHNICAL ORGANIZATION MEMBERSHIPS:

Member, American Astronomical Society

CIVIC OR COMMUNITY EXPERIENCE, MEMBERSHIPS, OR PREVIOUS PUBLIC SERVICE APPOINTMENTS:

I have been involved with numerous outreach events at local schools and juvenile halls, both for science and sustainability outreach.

COMMISSION ON AGING
AIRPORT COMMISSION *
BUDGET ENGAGEMENT COMMISSION *
COMMUNITY POLICE REVIEW COMMISSION
CULTURAL HERITAGE BOARD *
COMMISSION ON DISABILITIES
BOARD OF ETHICS
HUMAN RELATIONS COMMISSION
HUMAN RESOURCES BOARD
BOARD OF LIBRARY TRUSTEES *
MUSEUM OF RIVERSIDE BOARD
PARK AND RECREATION COMMISSION *
PLANNING COMMISSION *
BOARD OF PUBLIC UTILITIES *
TRANSPORTATION BOARD *

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NOTICE REGARDING INCOMPATIBLE OFFICES

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Do you currently hold a position as an appointed or elected member of a governmental board, commission, committee, or other body?

☐ Yes ☒ No

If “Yes”, please state position:

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[CV_siana.pdf](#)

Upload a Resume

Additional document(s)

Additional document(s)

How did you learn about the Board and Commission vacancies?

☒ Referred by

Are you interested in being contacted by the Registrar of Voters to volunteer as a poll worker?

☐ Yes ☒ No

Brian Siana

CONTACT INFORMATION

[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]

EDUCATION

PhD – Physics, December 2005

- **University of California - San Diego**, La Jolla, CA USA
- “Optical-IR Selection of High-Redshift QSOs and the $z=3$ QSO Luminosity Function”
- Advisor: Professor Harding E. (Gene) Smith

BS – Applied and Engineering Physics, May 1999

- **Cornell University**, Ithaca, NY USA

POSITIONS

Associate Faculty Director of Sustainability, **UC Riverside**, 2018-present

Associate Professor, Dept. of Physics and Astronomy, **UC Riverside**, 2017-present

Assistant Professor, Dept. of Physics and Astronomy, **UC Riverside**, 2011-2017

Senior Postdoctoral Scholar, **Caltech**, 2008-2011

Sponsor: Chuck Steidel

Postdoctoral Researcher, Spitzer Science Center, **JPL/Caltech**, 2005-2008

Supervisor: Harry Teplitz

AWARDS

Junior Excellence in Teaching (JET) Award (UCR, 2016) - Annual award to assistant professor demonstrating commitment, determination, and outstanding teaching

Commitment to Graduate Diversity Award (UCR, 2018) - Annual award to faculty member who “actively champions efforts to promote and maintain a diverse and inclusive campus climate”

RESEARCH INTERESTS

- **Gravitational Lensing:** Harnessing the magnifying power of strong gravitational lenses to study the properties of galaxies too faint/small to be studied with existing telescopes.
- **Reionization of the Intergalactic Medium and Ionizing Backgrounds:** Determining the mechanisms that allow ionizing photons to escape from galaxies into the intergalactic medium.
- **Dwarf Galaxies:** Understanding the unique properties of dwarf galaxies: metal production and outflow, bursty star formation, dust extinction, and dark matter properties.

CITATION METRICS

- 110 refereed papers (as of Nov. 02, 2019)
- h -index= 51 (NASA ADS)
- 8997 total citations (as of Nov. 02, 2019)

COMMITTEES

Chair, Sustainability Working Group, LRDP (2019-).
Keck Observatory UC Time Allocation Committee (2018-)
UCR Committee on Sustainability (2019-)
Committee on Diversity (Physics Dept., 2016-, chair: 2017-)
Cal-Bridge (CSU-UC Bridge Program) Steering Committee (2016-)
Graduate Admissions Committee (Physics Dept., 2016-)

Space Telescope User's Committee (2013-2015), **Chair** (2014-2015)
 Spitzer Space Telescope TAC (2013, 2016), **Panel Chair** (2013)
 Hubble Deep Fields Initiative Science Working Group (2012)
 Hubble Space Telescope TAC (2012-2013)
 UC Observatories Advisory Committee (2011-2014)

PROGRAMS AWARDED AS PI ONLY	<ul style="list-style-type: none"> • PI, NSF/AST (2016), (\$371,982) "Comprehensive Spectroscopic Study of Gravitationally Lensed Dwarf Galaxies at the Peak Epoch of Star Formation" • PI, Hubble Space Telescope (2015), 48 orbits: (\$173,061) "The Final UV Frontier: Legacy Near-UV Imaging of the Frontier Fields" • PI, Hubble Space Telescope (2014), Medium Hubble Archival Proposal: (\$88, 077) "Quantifying Bursty Star Formation and Dust Extinction in Dwarf Galaxies at $0.75 < z < 1.5$" • Co-PI, NSF (2013), (\$133,721 to B. Siana) "The MOSFIRE Deep Evolution Field Survey" • PI, Hubble Space Telescope (2013), 48 orbits: (\$186,679) "The Ultraviolet Frontier: Completing the Census of Star Formation at Its Peak Epoch" • PI, Hubble Space Telescope (2012), 26 orbits: (\$130,694) "Ultra-Faint Galaxies at the Peak Epoch of Star Formation" • PI, Hubble Space Telescope (2011), 27 orbits: (\$84,979) "Resolving Lyman Continuum Emission from Lyα-Emitters" • PI, Hubble Space Telescope (2010), 36 orbits: (\$160,139): "Ionizing Emission from the Faint Galaxies Responsible for Reionization" • PI, Hubble Space Telescope (2008), 39 orbits: (\$167,630): "Resolved Imaging of Escaping Lyman Continuum" • PI, Spitzer Space Telescope (2008), 22 hours: (\$109,800): "The First Investigation of the 3.3 Micron PAH Feature at High Redshift" • PI, Hubble Space Telescope (2007), 37 orbits: (\$154,062): "First Resolved Imaging of Escaping Lyman Continuum" • PI, Spitzer Space Telescope (2007), 16.6 hours: (\$77,970): "Harnessing High Redshift Beacons: IRS Spectra of Lensed LBGs" • PI, Spitzer Space Telescope (2006), 21.8 hours: (\$90,155): "The First IRS Spectrum of a Lyman Break Galaxy"
TEACHING EXPERIENCE	<ul style="list-style-type: none"> • PHYS 018 - Energy & Environment (non-science majors) • PHYS 040A - Classical Mechanics (intro. level for physical scientists and engineers) • PHYS 111 - Stellar Astrophysics (upper level, physics majors) • PHYS 203 - Statistical Astronomy (grad level) • PHYS 214 - Observational Techniques (grad level)
MENTORING	<ul style="list-style-type: none"> • Undergraduate students: 6 student researchers, 2 undergrad. theses, 1 honors thesis • Summer interns: 1 Cal-bridge scholar (2018), 1 student from U. of Lyon (2018) • Graduate students: Anahita Alavi (2011-2016), William Freeman (2012-2017), Kaveh Vasei (2013-2018), Najmeh Emami (2014-2019), Timothy Gburek (2015-), Christopher Snapp Kolas (2018-) • Postdocs: Alberto Dominguez (2011-2014), Anahita Alavi (2016-2017)
REFEREED PUBLICATIONS	Link to ADS list of publications

Application Form**Profile****Office Use Only:**☒ Ward 4**Which Boards would you like to apply for?**

Board of Public Utilities: Submitted

Ms./Mr.

Brees

Ronald

First Name

T.

Middle Initial

Brees

Last Name

Home Address

Suite or Apt

RIVERSIDE

City

CA

State

Postal Code

Primary Phone

Alternate Phone

Email Address

Golden State Water Company

Employer

CAD Technician III

Job Title

Business Address**Business Phone****Length of residence in City of Riverside**

13 Years

Are you a registered voter of the City of Riverside?☒ Yes ☐ No

Have you ever been convicted of a crime of moral turpitude?

☐ Yes ☒ No

Do you have adequate time to serve?

☒ Yes ☐ No

*Eligibility requirements per City Charter Article VIII Section 805.

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You are welcome to provide a resume and/or letters of endorsement.

Interests & Experiences

WHY YOU WANT TO SERVE ON A CITY BOARD OR COMMISSION:

I have served in a public capacity via my military service and public utilities industry and want to help shape my community. I want to make sure my community's interests are represented and given a voice.

EXPERIENCE OR SPECIAL KNOWLEDGE PERTAINING TO AREA(S) OF INTEREST:

I believe that with my engineering background and 10+ years within the public utility industry I can bring a real honest view of how utilities can be best implemented and planned for.

EDUCATIONAL BACKGROUND:

I hold a bachelors in Public Administration and a Masters in Project Management & Operations.

OCCUPATIONAL EXPERIENCE:

I have worked in the engineering industry for over 20 years and specifically in the public utilities industry for the past 10+ years.

PROFESSIONAL OR TECHNICAL ORGANIZATION MEMBERSHIPS:

None

CIVIC OR COMMUNITY EXPERIENCE, MEMBERSHIPS, OR PREVIOUS PUBLIC SERVICE APPOINTMENTS:

None

COMMISSION ON AGING
AIRPORT COMMISSION *
BUDGET ENGAGEMENT COMMISSION *
COMMUNITY POLICE REVIEW COMMISSION
CULTURAL HERITAGE BOARD *
COMMISSION ON DISABILITIES
BOARD OF ETHICS
HUMAN RELATIONS COMMISSION
HUMAN RESOURCES BOARD
BOARD OF LIBRARY TRUSTEES *
MUSEUM OF RIVERSIDE BOARD
PARK AND RECREATION COMMISSION *
PLANNING COMMISSION *
BOARD OF PUBLIC UTILITIES *
TRANSPORTATION BOARD *

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[Ron Brees Resume.docx](#)

Upload a Resume

Additional document(s)

Additional document(s)

How did you learn about the Board and Commission vacancies?

☒ Utility Bill Insert

Are you interested in being contacted by the Registrar of Voters to volunteer as a poll worker?

☐ Yes ☒ No

Ron Brees

OBJECTIVE: To utilize and continue to develop the project management and design skills acquired through various positions and responsibilities I have held.

SOFTWARE PROFICIENCY:

Microsoft Office Suite
ArcGIS Map
ArcGIS Pro

Microsoft Project
AutoCad R14-2020
Autodesk Civil 3D

EDUCATION:

Bachelors in Public Administration from Southern New Hampshire University - Sep-2018
Currently enrolled at Southern New Hampshire University for a Masters degree in Project Management & Operations.

PROFESSIONAL EXPERIENCE

CAD Technician III, Golden State Water Company, 7/20-Present

- Management of water improvement projects assigned through Capital Program
- Responsible for the drafting of drawings in conformance with company standards.
- Research and draft as-built drawings.
- Research underground structures and utilities for use in plan preparation.

Engineering Technician, Elsinore Valley Municipal Water District, 1/10-7/20

- Project Management for Capital Improvement Program projects
- Utilize GIS software for exhibit creation and analysis purposes.
- Reviewing contractor packages for compliance with the District's standards.
- Responsible for review and maintenance of record drawings
- Responsible for Capital Improvement project construction inspection
- Responsible for coordination with neighboring districts on utility conflicts

Cad Technician, Project Partners (For Golden State Water Company), 4/09-1/10

- Management of water improvement projects assigned through Capital Program
- Responsible for the drafting of drawings in conformance with company standards.
- Research and draft as-built drawings.
- Research underground structures and utilities for use in plan preparation.

Cad Coordinator, Stantec Consulting Ltd, 8/08-3/09

- Responsible for the supervision of a team of CAD Technicians for the purpose of completing project drawings in conformance with company and client standards.
- Assessed technical skills of team and assigned work accordingly
- Convert GIS Shape files to CAD files for production work.
- Managed and helped to build the technical skills of team members when possible.

Cad Technician, Stantec Consulting Ltd, 2/05-8/08

- Responsible for drafting of commercial use sites.
- Evaluated existing land for proposed lots, detention basins, water quality basins, or other land usages.
- Work directly with clients to accomplish the goals that are necessary to meet the project deadlines when needed.
- Corrected and made red-line corrections for City Planners and Engineer.
- Use AutoCAD Map & Land Desktop versions 2005 through 2008 and Civil 3D 2008. Utilized for standards committee when company decided to first develop standards for Civil 3D.

Cad Technician, SP2 Inc., 12/03-2/05

- Responsible for design and drafting of housing tract for residential housing.
- Proficient in the use of AutoCAD version 2002 and Softdesk on AutoCAD r14.
- Work directly with clients to accomplish the goals that are necessary to meet the project deadlines when needed.

Design Drafter, SPEC Services 9/00 to 2/03

- Responsible for design and drafting of pipeline systems, piping systems, Civil plans, structural plans, and mapping backgrounds.
- Utilized photo mapping, utility drawings, and surveying data to produce base mapping for use in construction drawing plans.

- Utilized Land Development Desktop to create accurate mapping drawings and profile plans.
- Worked with and experienced with petro-chemical engineering practices and standards.

Application Form**Profile****Office Use Only:**☒ Ward 4**Which Boards would you like to apply for?**

Board of Public Utilities: Submitted

Ms./Mr.

Dr

Kerry

First Name

M

Middle Initial

Hanson

Last Name

Home Address

Suite or Apt

Riverside

City

CA

State

Postal Code

Primary Phone

Alternate Phone

Email Address

University of California, Riverside

Employer

Research Chemist

Job Title

Business Address**Business Phone****Length of residence in City of Riverside**

15 years

Are you a registered voter of the City of Riverside?☒ Yes ☐ No

Have you ever been convicted of a crime of moral turpitude?

☐ Yes ☒ No

Do you have adequate time to serve?

☒ Yes ☐ No

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Interests & Experiences

WHY YOU WANT TO SERVE ON A CITY BOARD OR COMMISSION:

While planning our family's move to Riverside fifteen years ago, I remarked to my husband in our tiny Illinois kitchen how I felt already connected to the city as I interacted with community groups found on the city's website. I have not been proved wrong that Riverside would become our hometown. Since moving to Mission Grove in Ward 4, I have become involved in Riverside through PTA, National Charity League, and as a chemist and head of outreach for the Department of Chemistry at UCR. Through NCL, I have had the pleasure of engaging in many city activities, and recently heard the call of Mayor Lock Dawson who encouraged her fellow NCL members to become involved on Boards and Commissions. I am interested in using my scientific, analytical background to serve the city by helping RPU grow and adapt with Riverside and a rapidly changing California. RPU is a resource that gives Riverside a competitive advantage for job growth, and our Green Riverside initiative showcases our leadership in sustainability. My goal as a Board member would be to process disparate data sources (community needs, economic impact, environmental regulations, state mandates) and help communicate that data effectively to the city and our residents so RPU remains a leading asset for our community.

EXPERIENCE OR SPECIAL KNOWLEDGE PERTAINING TO AREA(S) OF INTEREST:

I have strong analytical and problem-solving skills developed over my 30-year career in academia and as a consultant for international personal care corporations. I enjoy working with a team to solve complex problems, while simultaneously distilling information so it can be communicated to a wider audience. My interest in resource management has lasted since I began my career as a chemist for the Louisiana-Pacific pulp mill in Humboldt County in the 1990s, which continues today as an avid reader of California resource news.

EDUCATIONAL BACKGROUND:

PhD, Chemistry, University of California, San Diego, 1998.

OCCUPATIONAL EXPERIENCE:

Here, I will refrain from repeating expertise that can be found on my attached C.V. Instead, I would like to illustrate my commitment to problem solving and community engagement. As a parent, I saw a lack of understanding of the scientific method and poor participation in the RUSD science and engineering fair at Taft Elementary, our neighborhood school. I built a relationship between UCR Chemistry and Taft's 1st, 3rd, and 4th grades that provides a multi-year effort, circling back to reinforce themes of the scientific method, states of matter and electricity and magnetism. By bringing in a great group of motivated undergraduate and graduate students, all with unique backgrounds, including some formerly undocumented students, the Taft students get an opportunity to learn from young scientists and dare to dream big. We culminate the program with a trip to UCR for all of 4th grade, including "Lunch at Lothian," which is a true highlight. I cannot tell you the number of times I have heard "I'm going to college" after the kids see the dessert station. I use this as an example to showcase my interest and ability in problem solving and giving back to my community by enlisting the resources at hand.

PROFESSIONAL OR TECHNICAL ORGANIZATION MEMBERSHIPS:

American Chemical Society, Society of Cosmetic Chemists

CIVIC OR COMMUNITY EXPERIENCE, MEMBERSHIPS, OR PREVIOUS PUBLIC SERVICE APPOINTMENTS:

National Charity League, Inc. Riverside Chapter: Patroness 2016-to date, Board Secretary 2017-2019, Grade Level Adviser Elect 2021-2022. Head of Outreach, Department of Chemistry, University of California, Riverside, 2010-to date. SunWise Program, Taft Elementary, 2015-2018. AAD grant awarded 2019. PTA, RUSD

COMMISSION ON AGING
AIRPORT COMMISSION *
BUDGET ENGAGEMENT COMMISSION *
COMMUNITY POLICE REVIEW COMMISSION
CULTURAL HERITAGE BOARD *
COMMISSION ON DISABILITIES
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[Hanson 2021_RPU.pdf](#)

Upload a Resume

Additional document(s)

Additional document(s)

How did you learn about the Board and Commission vacancies?

None Selected

Are you interested in being contacted by the Registrar of Voters to volunteer as a poll worker?

☐ Yes ☒ No

Kerry M. Hanson



Education	<p>University of California, Santa Cruz B.S., Chemistry, 1992 Undergraduate Research Advisors: Prof. David Kligar & Prof. Phil Crews</p> <p>University of California, San Diego Ph.D., Chemistry, 1998 Thesis Advisor: Prof. John D. Simon</p> <p>University of Illinois at Urbana-Champaign Postdoctoral Fellow, 1998-2001 Postdoctoral Advisor: Prof. Robert M. Clegg</p>
Employment	<p>Professional Research Chemist, University of California, Riverside February 2007-to date</p> <p>Visiting BYA Researcher, University of California, Riverside January 2005-January 2007</p> <p>Visiting Research Assistant Professor, Laboratory for Fluorescence Dynamics, Department of Physics, University of Illinois at Urbana-Champaign, Sept. 2001-Dec. 2004</p> <p>Kerry M. Hanson, Personal Care/Sunscreen Consulting, 2001-to date</p>
5 Year Career Highlights	<p>2020: Discovered avobenzone photostability is drastically improved under micelle encapsulation. Relevance: Improved sunscreen UVA-blocking efficacy.</p> <p>2019: Filmed expert for PBS NOVA's "Beyond the Elements: Life" with David Pogue. Air-date: February 17, 2021</p> <p>2017: Patent issued for "Methods for up-conversion using hybrid molecule-nanocrystal materials."</p> <p>2015: Discovered octyl methoxycinnamate degrades under aggregated conditions. Relevance: Improved sunscreen UVB-blocking efficacy.</p>
Teaching	<p>Science of Skin & Hair Chemistry 1B</p>

**Student
Mentorship**

2007-2020: 8 Undergraduate Research Students, Bardeen Lab

- Including 4 RISE students
- 2 publications (#1, # 3)
- Duties included directing their research projects, weekly meetings, lab training

2007-2020: 19 Graduate Students & 4 post-docs, Bardeen Lab

- 5 publications (#1-#5)
- Duties included lab instrument & data analysis training & collaboration, lit search training, exam & presentation prep, career guidance

Publications

1. Hanson, K. M.; Cutuli, M.; Rivas, T.; Antuna, M.; Saoub, J.; Tierce, N. T.; Bardeen, C. J. Effects of solvent and micellar encapsulation on the photostability of avobenzone. *Photochemical and Photobiological Sciences*, 19, 390-398 (2020).
2. Dong, X.; Tong, F.; Hanson, K. M.; Al-Kaysi, R. O.; Kitagawa, D.; Kobatake, S.; Bardeen, C. J. Hybrid organic-inorganic photon-powered actuators based on aligned diarylethene nanocrystals. *Chemistry of Materials*, 31, 1016-1022 (2019).
3. Hanson, K.M.; Narayanan, S.; Nichols, V. M.; Bardeen, C. J. Photochemical degradation of the UV filter octyl methoxycinnamate in solution and in aggregates. *Photochem. Photobiol. Sci.*, 14, 1607-1616 (2015).
4. Huang, Z; Li, X; Mahboub, M; Hanson, K. M.; Nichols, V. M.; Le, H.; Tang, M. L.; Bardeen, C. J. Hybrid molecule-nanocrystal photon upconversion across the visible and near-IR. *Nano Lett.*, 15, 5552-5557 (2015).
5. Liu, H.; Nichols, V. M.; Jahnasouz, S.; Chen, Y.; Hanson, K. M.; Bardeen, C. J.; Li, X. Synthesis and photophysical properties of a “face-to-face” stacked tetracene dimer. *Phys. Chem. Chem. Phys.* 17, 6523-6531 (2015).
6. Hanson, K. M.; Beasley, D. G.; Meyer, T. A.; Bardeen, C. J. Antioxidants in sunscreens for improved ROS photoprotection. *Cosm. Toil.*, **126**, 712-716 (2011). *Cover Article*
7. Bonda, C.; Pavlovic, A.; Hanson, K. M.; Bardeen, C. J. Singlet quenching proves faster is better for photostability. *Cosm. Toil.*, **125**, 40-48 (2010). *Best paper award, Society of Cosmetic Chemists, 2010.*
8. Hanson, K.M.; Bardeen C.J. Application of nonlinear optical microscopy for imaging skin. *Photochem. Photobiol.* 85, 33-44 (2009). *Cover article.*
9. Hanson, K.M.; Davis, S.K.; Bardeen, C.J. Two-photon standing-wave fluorescence correlation spectroscopy. *Opt. Lett.* 32, 1-4 (2007).
10. Hanson, K. M.; Gratton, E.; Bardeen, C. J. Sunscreen enhancement of UV-induced ROS in the skin. *Free Radical Biology Medicine*, **41**, 1205-1212 (2006).
11. Lee, Erica H.; Faulhaber, D.; Hanson, K. M. et al. Dietary lutein reduces UVR-induced inflammation and immunosuppression. *Journal of Inv. Dermatol.*, **122**, 510-517 (2004).
12. Hanson, K. M.; Clegg, R. M. Bioconvertible vitamin antioxidants improve sunscreen photoprotection against UV-induced ROS. *J. Cosm. Sci.*, **54**, 589-598 (2003).
13. Behne, M. J.; Barry, N. J.; Hanson, K. M. et al. Neonatal development of the stratum corneum pH gradient: localization and mechanisms leading to emergence of optimal barrier function. *J. Invest. Dermatol.*, **120**, 998-1006 (2003).
14. Behne, M.; Meyer, J.; Hanson, K. M. et al. The sodium/hydrogen antiporter, NHE1, regulates stratum corneum extracellular acidification and permeability barrier function. *J. Biol. Chem.*, **277**, 47399-47406 (2002).
15. Hanson, K. M.; Behne, M. J.; Barry, N. P. et al. Two-photon fluorescence lifetime imaging of the skin stratum corneum pH gradient. *Biophys. J.*, **83**, 1682-1690 (2002).

16. Hanson, K. M.; Simon J. D. Epidermal trans-UA and the UVA-induced photoaging of the skin. *Proc. Nat. Acad. Sci.*, **95**, 10576-10578 (1998).
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Book Chapters

1. Meyer, T., Beasley, D., Hanson, K. M. Augmenting skin photoprotection beyond sunscreens, in *Principles and Practice of Photoprotection* (ed. S. Q. Wang & H. W. Lim), Springer International (Switzerland), pp. 439-460 (2016).
2. Hanson, K. M; Bardeen, C. J. Using two-photon fluorescence microscopy to study chemical phenomena in the skin, in *Biochemical Applications of Nonlinear Optical Spectroscopy* (ed. V. Yakolev), CRC Press, Taylor & Francis Group (Boca Raton), pp. 33-49 (2009).
3. Hanson, K. M.; Clegg, R. M. Two-photon fluorescence imaging and ROS detection with the epidermis. *Methods in Molecular Biology* (Totowa, NJ, US) (2004), 289 (Epidermal Cells), 413-421.

Popular Press

1. Hanson, K. M. "How do the chemicals in sunscreens protect our skin from damage," Publisher: *The Conversation*, May 25, 2017. Total Views: 315,378 on 9/9/20
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Salon/7,1529 ; The Conversation/35,477 ; Scientific American/35,109 ; CNN/33,435; EL PAIS/26,338 ; Washington Post/24,976; Smithsonian Magazine/14,168; PBS (including News Hour, Nova, Point Taken)/10041; 19 additional postings/remainder
2. Hanson, K. M. "Room for Debate: What We Don't Know." *New York Times*, July 5, 2010.
3. Interviewed and/or research featured in
 - "You Asked: Is Sunscreen Safe-and Do I Really Need It," *Time*, Markham Heid, July 30, 2014.
 - "When did sunscreens become so complicated," *Slate*, Melinda Wenner Moyer, June 13, 2013.
 - "Sunscreens Can Damage Skin, Researchers Find" (August 29, 2006)—reported in 32 popular newspapers and magazines (2006-2007).

- “Study Shows Antioxidants Play Vital Role in Protecting Skin” (September 1, 2001) – reported in popular newspapers and magazines (2001-2002).

Radio & Television	<ol style="list-style-type: none"> 1. <i>PBS NOVA “Beyond the Elements: Life” with David Pogue. Air date February 17, 2021.</i> 2. <i>Top of Mind with Julie Rose, BYU Radio, May 28, 2019</i> 3. <i>AirTalk with Larry Mantle, KPCC LA, July 19, 2010</i>
Professional Service & Outreach	<ol style="list-style-type: none"> 1. Transfer Student Initiative, 2017-2019 2. Target of Opportunity Faculty Recruitment, 2018 3. Focus School: <u>Taft Elementary</u>, 2007-Present 4. Chemistry Olympiad Representative, San Geronio Section of ACS at UCR, 2015-2019 5. Science Fear! Night National Chemistry Week, UCR, 2013 6. Community Events @ <ul style="list-style-type: none"> • Box Springs Elementary Moreno Valley, December 2019 • Highland Elementary, Riverside, October 2019 • Alcott Elementary, Riverside, May 2016 <i>English & Spanish event</i> • Castle View Elementary, Riverside, May 2015, 2016 <i>English & Spanish event</i> 7. Science Fair Judging for RUSD regionals, 2007-present 8. Reviewer for <ul style="list-style-type: none"> • <i>Environmental Science and Pollution Research</i> • <i>European Journal of Pharmaceutics and Biopharmaceutics</i> • <i>Food Toxicology</i> • <i>Journal of Biophotonics</i> • <i>Nature Nanotechnology</i> • <i>The Royal Society Research Grants</i>
Consulting	<ol style="list-style-type: none"> 1. Expert witness testimony, Defense, L’Oreal vs Johnson & Johnson & Merck, patent litigation. <i>Outcome: Defense</i> 2. Two-photon fluorescence imaging for sunscreen & antioxidant development, Schering-Plough/Bayer/Merck/Coppertone; P&G; L’Oreal.
Community	<ol style="list-style-type: none"> 1. National Charity League, Inc. Riverside Chapter, 2016-present; Secretary, 2017-2019 2. Mission Grove North Founding Community Member 3. PTA, RUSD
Thesis	<i>The spectroscopy of the epidermal ultraviolet chromophore urocanic acid.</i>