

Application Form

Profile

Neil _____ D _____ Tsutsui _____
First Name Middle Initial Last Name

Home Address _____ Suite or Apt _____
El Cerrito _____ CA _____ 94530
City State Postal Code

Primary Phone _____

Email Address _____

Which supervisorial district do you live in?

District 1

Education

Select the option that applies to your high school education *

High School Diploma

College/ University A

Name of College Attended

Boston University

Degree Type / Course of Study / Major

Biology, specialization in Marine Science

Degree Awarded?

Yes No

College/ University B

Name of College Attended

UC San Diego

Degree Type / Course of Study / Major

Ecology, Behavior, and Evolution

Degree Awarded?

Yes No

College/ University C

Name of College Attended

Degree Type / Course of Study / Major

Degree Awarded?

Yes No

Other schools / training completed:

Course Studied

Hours Completed

Certificate Awarded?

Yes No

Board and Interest

Which Boards would you like to apply for?

East Bay Regional Park District's Park Advisory Committee - BOS Appointee: Submitted

Seat Name

Have you ever attended a meeting of the advisory board for which you are applying?

Yes No

If you have attended, how many meetings have you attended?

I have attended nearly every meeting since my appointment to this board in June 2017

Please explain why you would like to serve on this particular board, committee, or commission.

I am currently in my third term as a member of the EBRPD Parks Advisory Committee, and am therefore well-versed in the current issues of importance in the District. I am passionate about protecting our wildlands and open spaces while increasing access to all people for recreation. I have extensive professional experience in science education and biological research, and thus have relevant expertise for this committee.

Qualifications and Volunteer Experience

I would like to be considered for appointment to other advisory boards for which I may be qualified.

Yes No

Are you currently or have you ever been appointed to a Contra Costa County advisory board, commission, or committee?

Yes No

List any volunteer or community experience, including any advisory boards on which you have served.

EAST BAY REGIONAL PARK DISTRICT, Parks Advisory Committee. Appointed by Contra Costa County Board of Supervisors. June 2017–Dec. 2020. Sierra Club, West Contra Costa Chapter. Vice-chair, May 2020-present. El Cerrito Environmental Quality Committee (2017-present; Vice-chair, 2019-2020; Chair, 2020-present).

Describe your qualifications for this appointment. (NOTE: you may also include a copy of your resume with this application)

As a professor of Environmental Science, Policy, and Management at UC Berkeley, I am keenly aware of the environmental challenges that we face today, and I am well-versed in a variety of topics related to ecology and global change. I currently serve as the Contra Costa County BOS representative on the PAC, and I have previously served on many University committees related to personnel, instruction, research, budgets, etc. at the levels of department, college, campus, and UC-wide. I believe that effective engagement with a variety of different user groups is crucial for the continued support of the parks, and that this engagement benefits society generally. In particular, I am interested in continuing to support and develop collaborations between the parts and student groups (university and K12), research scientists, and individuals from underrepresented groups. I have extensive experience collaborating on complex projects, and achieving measurable results within budgetary guidelines and on time. I oversee a medium-sized research lab at UC Berkeley I have been funded continuously with competitive federal and state grants.

[Tsutsui CV_Oct2020.pdf](#)

Upload a Resume

Conflict of Interest and Certification

Do you have a Familial or Financial Relationship with a member of the Board of Supervisors?

Yes No

If Yes, please identify the nature of the relationship:

Do you have any financial relationships with the County such as grants, contracts, or other economic relations?

Yes No

If Yes, please identify the nature of the relationship:

Please Agree with the Following Statement

I certify that the statements made by me in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge and undersand that all information in this application is publicly accessible. I understand that misstatements and/or omissions of material fact may cause forfeiture of my rights to serve on a board, committee, or commission in Contra Costa County.

I Agree

CURRICULUM VITAE
(abbreviated)

NEIL DURIE TSUTSUI
Professor and Michelbacher Chair

University of California, Berkeley
Department of Environmental Science,
Policy & Management
130 Mulford Hall, #3114
Berkeley CA 94720-3114

EDUCATION

Boston University, September 1994
BA in Biology, specialization in Marine Science.

University of California, San Diego – Department of Biology
PhD in Biology, September 2000
Dr. Ted J. Case – Thesis advisor

PROFESSIONAL APPOINTMENTS

University of California, Berkeley
Department of Environmental Science, Policy & Management
Abraham E. & Martha M. Michelbacher Chair in Systematic Entomology, 2017-present
Professor, 2014-present
Affiliate Faculty, Essig Museum of Entomology, 2007-present
Vice Chair for Instruction, 2010-2012, 2014-2015
Associate Professor, 2009-2014
Assistant Professor, 2007-2009

University of California, Irvine
Department of Ecology and Evolutionary Biology
Assistant Professor, 2003-2007

University of California, Davis
Post-doctoral Associate, 2000-2003
Section of Evolution and Ecology, Center for Population Biology
Dr. Richard K. Grosberg – Advisor

20 MOST RECENT PEER-REVIEWED PUBLICATIONS

(of 70 total)

- Tonione, M. A., K. Bi, and **N. D. Tsutsui**. 2020. Transcriptomic signatures of cold adaptation and heat stress in the thermally sensitive winter ant (*Prenolepis imparis*). PLoS ONE 15(10): e0239558 <https://doi.org/10.1371/journal.pone.0239558>
- Sánchez-Restrepo, A. F., L. Chifflet, V. A. Confalonieri, **N. D. Tsutsui**, M. A. Pesquero, and L. A. Calcaterra. 2020. Species delimitation and molecular phylogenetics of South American fire ant decapitating flies (Diptera: Phoridae: *Pseudacteon*). PLoS ONE 15(7):e0236086.
- Adams, S. A. and **N. D. Tsutsui**. 2020. The evolution of species recognition labels in insects. PHILOSOPHICAL TRANSACTIONS ROYAL SOCIETY LONDON B. **375**: 20190476.

- Tonione, M. A., S. Cho, G. Richmond, C. Irian, **N. D. Tsutsui**. 2020. Thermal acclimation ability differs between high- and low- elevation populations of the winter ant, *Prenolepis imparis*. *ECOLOGY & EVOLUTION* **8**:11385-11398.
- Naughton, I., C. Boser, **N. D. Tsutsui**, and D. A. Holway. 2020. Direct evidence of native ant displacement by the Argentine ant in island ecosystems. *BIOLOGICAL INVASIONS* **22**:681-691.
- Felden, A., C. I. Paris, D. G. Chapple, A. V. Suarez, **N. D. Tsutsui**, P. J. Lester, and M. A. M. Gruber. 2019. Native and introduced Argentine ant populations are characterised by distinct transcriptomic signatures associated with behaviour and immunity. *NEOBIOTA*. **49**:105-126.
- Buellesbach, J., B. A. Whyte, B., E. Cash, J. D. Gibson, K. J. Scheckel, R. Sandidge, and **N. D. Tsutsui**. 2018. Desiccation resistance and micro-climate adaptation: Cuticular hydrocarbon signatures of different Argentine ant supercolonies across California. *JOURNAL OF CHEMICAL ECOLOGY* **44**:1101-1114.
- Torres, C. W., M. A. Tonione, S. R. Ramírez, J. R. Sapp, and **N. D. Tsutsui**. 2018. Genetic and chemical divergence among host races of a socially parasitic ant. *ECOLOGY & EVOLUTION*. **8**:11385-11398. DOI: <http://dx.doi.org/10.1002/ece3.4547>
- Felden, A., C. I. Paris, D. G. Chapple, J. Haywood, A. V. Suarez, **N. D. Tsutsui**, P. J. Lester, and M. A. M. Gruber. 2018. Behavioural variation and plasticity along an invasive ant introduction pathway. *JOURNAL OF ANIMAL ECOLOGY* **87**(6):1653-1666. <https://doi.org/10.1111/1365-2656.12886>
- Tsutsui, N. D.** 2018. Understanding the nature of ant cognition by studying ant cognition in Nature (Box). Animal Cognition, Nereida Bueno-Guerra, Federica Amici (eds). Cambridge University Press.
- Tsutsui, N. D.** 2018. Strangers in a strange land: *Biological Invasions and Animal Behavior* (Book review). *BIOSCIENCE* **68**(3):223-224. <https://doi.org/10.1093/biosci/bix160>
- Cridland, J., S. R. Ramírez, C. Dean, A. Sciligo, and **N. D. Tsutsui**. 2018. Genome sequencing of museum specimens reveals rapid changes in genetic composition of honey bees in California. *GENOME BIOLOGY & EVOLUTION* **10**(2):458-472.
- Cridland, J., **N. D. Tsutsui**, and S. R. Ramírez. 2017. The complex demographic history and evolutionary origin of the western honey bee, *Apis mellifera*. *GENOME BIOLOGY & EVOLUTION* **9**(2):457-472. DOI: <https://doi.org/10.1093/gbe/evx009>.
- Mathis, K. A. and **N. D. Tsutsui**. 2016. Dead ant walking: A myrmecophilous beetle predator uses parasitoid host location cues to selective prey on parasitized ants. *PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON, B* **283**:20161281.
- Mathis, K. A. and **Tsutsui, N. D.** 2016. Cuticular hydrocarbon cues are used for host acceptance by *Pseudacteon* spp. phorid flies that attack *Azteca sericeasur* ants. *JOURNAL OF CHEMICAL ECOLOGY* **42**:286-293.
- Emery, V. J. and **Tsutsui, N. D.** 2016. Differential sharing of chemical cues by social parasites versus social mutualists in a three-species symbiosis. *JOURNAL OF CHEMICAL ECOLOGY* **42**:277-285.
- Torres, C. W. and **Tsutsui, N. D.** 2016. The effect of social parasitism by *Polyergus breviceps* on the nestmate recognition system of its host, *Formica altipetens*. *PLOS ONE* **11**(2): e0147498.
- Tsutsui, N. D.** 2014. Controlling the spread of Argentine ants. *VOICE OF THE PCOC*. Fall:10-11.
- Tillberg, C.V, Edmonds, B., Freauff, A., Hanisch, P., Paris, C., Smith, C.R., **Tsutsui, N. D.**, Wills, B.D., Wittman, S.E., and A.V Suarez. 2014. Foraging ecology of the tropical giant hunting ant *Dinoponera australis* (Hymenoptera: Formicidae) – Evaluating mechanisms for high abundance. *BIOTROPICA* **46**(2):229-237.
- Tsutsui, N. D.** 2013. Dissecting ant recognition systems in the age of genomics. *BIOLOGY LETTERS* **9**:20130416.

GRANT SUPPORT

- CALIFORNIA STRUCTURAL PEST CONTROL BOARD, “Diet and colony structure of two emerging invasive pest ants”. October 2018 – August 2020. **\$146,325**.
- NATIONAL SCIENCE FOUNDATION LONG-TERM RESEARCH IN ENVIRONMENTAL BIOLOGY (LTREB), (co-PI; D.A. Holway, PI). “LTREB Collaborative Proposal: Large-scale removal of introduced ants as a test of community reassembly”. April 2017 – March 2022. **\$391,313** (Tsutsui share: **\$177,548**).
- NATIONAL SCIENCE FOUNDATION, IOS-SDS, (B. Fisher, co-PI), “Collaborative Research: Scents of Self: How Trade-offs Shape Self/Non-self Recognition Cues in a Supercolonial Insect” (ranked #1 in panel). February 2016 – January 2020. **\$830,933**.
- UNITED STATES DEPARTMENT OF AGRICULTURE, NIFA-AFRI. “Using Functional Genomics to Link Behavior, Chemical Ecology and Chemoreception in a Widespread and Damaging Agricultural Pest” February 2016 – January 2019. **\$498,083**.
- UC BERKELEY BAKAR FELLOW, “Deploying Insect Pheromones to Control a Widespread and Damaging Insect”, July 2012 – June 2017. **\$250,000**.
- UCMEXUS, (K. Mathis, co-PI), “Host Selection and Successful Parasitism of the Aggressive Arboreal Ant *Azteca instabilis* by Decapitating Phorid Flies (Genus: *Pseudacteon*) in Dynamic Coffee Agroecosystems”, January 2012 – December 2013. **\$11,852**.
- GORDON AND BETTY MOORE FOUNDATION, “Using Genomics, Isotopes and Pollen to Illuminate the Past and Predict the Future of California Bees”, November 2011 – October 2014. **\$379,339**.
- CALIFORNIA STRUCTURAL PEST CONTROL BOARD, “Bedbug detection using airborne pheromone cues”. February 2011 – February 2012. **\$116,650**.
- DEFINING WISDOM, sponsored by the University of Chicago Arete Initiative and the John Templeton Foundation. “The Wisdom of the Ant: The Role of Experience in Sociality and Aggression”. October 2008 – September 2010. **\$100,000**.
- UNITED STATES DEPARTMENT OF AGRICULTURE, NRI-CSREES 2008-35302-04680. “An Integrative Analysis of Altered Social Behavior in the Invasive Argentine Ant (*Linepithema humile*)”. (ranked #8 of 83). September 2008 – August 2011. **\$425,000**.
- COMMITTEE ON RESEARCH, FACULTY RESEARCH GRANT (UC-BERKELEY), “A preliminary analysis of candidate genes for aggression in the invasive Argentine ant”. 2007 – 2008. **\$5,000**.
- AUSTRALIAN RESEARCH COUNCIL, “Sociality and a sense of smell: Receptor organ evolution in ants”. (PI: Mark A. Elgar, University of Melbourne). 2008 – 2010. **\$225,000**.
- CALIFORNIA STRUCTURAL PEST CONTROL BOARD, “The Role of Genetics and Cuticular Hydrocarbons in Argentine ant Aggression”. (Co-Investigator: Ken Shea, UC-Irvine, Department of Chemistry). September 2005 – August 2008. **\$312,037**.
- UNITED STATES DEPARTMENT OF AGRICULTURE, NRI-CSREES 2004-35302-14865. “The Genetic and Biochemical Basis of Altered Social Behavior in the Invasive Argentine ant (*Linepithema humile*)” (ranked #2 of 117). September 2004 – August 2007. **\$325,000**.

TEACHING EXPERIENCE & MENTORSHIP

GRADUATE STUDENTS ADVISED:

11 PhD students since 2003.

POST-DOCTORAL RESEARCHERS ADVISED:

12 since 2003.

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GRADUATE COMMITTEE MEMBER

39 since 2003.

UNDERGRADUATES MENTORED:

>100 since 2003.

COURSES TAUGHT:

UC-Berkeley

Insect Behavior (ESPM150, ESPM142), each Fall 2008-2012; 2015-2017, 2019-2020.

Molecular Approaches to Environmental Problem Solving (ESPM 192), Spring 2015, 2016, 2018, 2019.

Advanced Chemical Ecology (ESPM290), Fall 2014, 2016, 2020.

Insect Chemoreception and Chemical Ecology (ESPM290), Spring 2014.

Senior Seminar-Conservation & Resource Studies (ESPM194), Spring 2011 (two classes), Spring 2012.

Genetics and Genomics of Insect Behavior (ESPM290), Spring 2009.

Environmental Science Forum (ESPM 201C), Spring 2008.

UC-Irvine

Graduate Core in Evolution, Winter 2007.

Advanced Evolutionary Biology (BS168), Spring 2004, 2005, 2006.

Freshman Seminar (BS2B), “*Social behavior of ants*”, Spring 2004, 2005, 2006, 2007.

20 MOST RECENT PRESENTATIONS & PROFESSIONAL MEETINGS

(of 76 total)

Invited workshop speaker. China Training Program for New National Parks System. “Management of Exotic Species”. Berkeley, CA. September 2019.

Invited seminar speaker. Kyoto University. “The genetics and chemical ecology of *Polyergus* kidnapper ants”. Kyoto, Japan. June 2019.

Invited workshop speaker. Winter Workshop Series for pest control operators, Target Speciality Products. Anaheim, CA. March 2019.

Invited symposium speaker. World Life Science Conference. "Of ants and antennae: How pheromones define the boundaries of both societies and species", Beijing, China. October 2018.

Invited seminar speaker. Chinese Academy of Sciences, Institute of Zoology. "Scents of self: How social context shapes ant colony recognition systems", Beijing, China. October 2018.

Invited seminar speaker – Animal Behavior Seminar Series. UC Davis, Davis, CA. March 2018.

Plenary speaker. American Association of IPM Entomologists, Monterey, CA. “The behavior and social structure of ants”, February 2016.

Invited symposium speaker – International Congress of Entomology, Orlando, FL, September 2016.

Invited speaker/panelist – Center for Population Biology mini-conference, UC–Davis. February 2015.

Invited seminar speaker – PERT Program/Center for Insect Science, U of Arizona. March 2015.

Invited speaker – Evolution of Organismality, St. Louis, MO. May 2015.

Invited speaker – Target Speciality Products, Sante Fe Springs, CA. June 2015.

Invited speaker – Target Speciality Products, San Marcos, CA. June 2015.

Invited seminar speaker – Department of Entomology, UC–Davis. January 2014.

Invited seminar speaker –Essig Brunch, Essig Museum of Entomology, UC Berkeley, April 2014.

Invited speaker – Target Speciality Products, San Jose, CA. June 2014.

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Invited speaker – Target Speciality Products, Sacramento, CA. June 2014.

Keynote speaker – Pest Control Operators of California Expo, Las Vegas, NV. June 2014.

Invited speaker – Invasion Genetics: The Baker and Stebbins Legacy, Asilomar, CA.
August 2014.

Invited symposium speaker – Entomology Society of America, Portland, OR, November 2014.

SERVICE

COMMITTEE MEMBER

EAST BAY REGIONAL PARK DISTRICT, Parks Advisory Committee. Appointed by Contra Costa County Board of Supervisors. June 2017–Dec. 2020.

SIERRA CLUB, West Contra Costa Chapter. Vice-chair, May 2020–present.

CO-FOUNDER

BACKYARD BIODIVERSITY PROJECT. 2016–present.

BAY AREA ANT GROUP (BAAG). 2007–present.

EDITORIAL BOARDS:

BMC ECOLOGY. Associate Editor, 2011–present.

BIOLOGICAL INVASIONS. Associate Editor, 2011–present.

PLOS GENETICS. Guest Editor, 2013.

AUSTRALIAN JOURNAL OF ZOOLOGY. Associate Editor, 2007–2012.

COMMITTEE MEMBER:

NATIONAL ECOLOGICAL OBSERVATORY NETWORK (NEON) DESIGN CONSORTIUM, Invasive Species subcommittee. 2004–2005.

REVIEWER (manuscripts and grant proposals):

Several hundred from 2003–present

Journals, including: *The American Naturalist, Animal Behaviour, Annals of the Entomological Society of America, Behavioral Ecology, Behavioral Ecology & Sociobiology, Biology Letters, BMC Ecology, Conservation Biology, Diversity & Distributions, Ecological Entomology, Ecology, Ecology Letters, eLife, Evolution, Evolutionary Applications, Evolutionary Ecology Research, Genetics, Insectes Sociaux, Journal Chemical of Ecology, Naturwissenschaften, Molecular Ecology, Oecologia, PLoS One, Proceedings of the National Academy of Sciences, Scientific Reports.*

Funding agencies, including: *The National Science Foundation, US Department of Agriculture, National Institute for Climate Change Research (US Dept of Energy), Natural Environment Research Council.*

SERVICE TO UC SYSTEM:

Member – Faculty advisory committee, UC Education Abroad Program (UCEAP). 2013–present.

SERVICE TO CAMPUS:

Member – UC BERKELEY, Hill Campus, Long Range Development Plan Committee, 2019–present.

Member – Committee on Courses of Instruction (COCI). 2014–2018.

- Sciences subcommittee. 2014–2015.
- Variances subcommittee. 2015–2016.
- Academic Senate Advisory Committee to Student Information Systems (SIS). 2016–2018.

Member – Berkeley Institute for Global Change Biology. 2010–present.

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Member – *Ad hoc* campus tenure review committee–2010, 2014.
Member – Ecological Preserve and Open Space committee. 2006–2007 (UCI).
Member – Phi Beta Kappa nominating committee. 2004–2007 (UCI).

SERVICE TO SCHOOL/COLLEGE:

Member – RCNR Executive Committee. Sept. 2019–present.
Faculty Judge – College of Natural Resources Gradfest Symposium. 2011.
Faculty Judge – College of Natural Resources Honor Symposium. 2010, 2015.
Member – Biological Sciences Executive Committee. Elected by department; 2006–2008 (UCI).
Member – Crystal Cove Research Cottage committee. 2005–2006 (UCI).

SERVICE TO THE DEPARTMENT:

Member – Equity, Inclusion, and Diversity Committee. 2019–present.
Member – Race, Culture, and Environment search committee. 2016.
Vice Chair for Instruction. 2010–2012, 2014–2015.
Chair – Undergraduate Programs Committee. 2010–2012, 2014–2015.
Chair – *Ad hoc* personnel action committee. 2012, 2016.
Member – ESPM Departmental Vision committee. 2012.
Member – Molecular Environmental Biology undergraduate advising committee. 2008–present.
Member – Graduate student advising committee. 2008–present.
Member – Global Change Organismal Biology search committee. 2010.
Member – Environmental Science undergraduate major committee. 2008–2010.
Member – Environmental Science undergraduate major transition committee. 2010–2011.
Chair – ESPM Safety Committee. 2009.
Member – Graduate admissions committee. 2009–2010.
Member – *Ad hoc* tenure and merit review committees – 2 times since 2007.
Chair – Graduate student awards committee. 2007–2008.
Chair – Molecular Analytical Facility Steering committee. 2006–2007. (UCI)
Member – Ecology search committee. 2 positions; 2005–2006. (UCI)
Member – Departmental web-page committee. 2003–2007. (UCI)
Member – *Ad hoc* personnel merit review committee – 5 times since 2003. (UCI)