

Kennan Kellaris Salinero
Curriculum vitae
2022

ReImagine Science
925.584.8788

Executive Director
kennan@reimaginescience.org

EDUCATION

- 1988-1993 University of Massachusetts Postdoctoral Fellow - Biochemistry**
University of Massachusetts Medical Center, Worcester, MA
Research Advisor: Dr. Reid Gilmore
- 1982-1989 Ph.D. - Chemistry**
University of California, San Diego
La Jolla, CA
Dissertation Advisor: Dr. Jack Kyte
Dissertation Title: "Assessment of the Number of Free Cysteines and Isolation and Identification of Cystine-Containing Peptides from Nicotinic Acetylcholine Receptor."
- 1976-1978 Bachelor of Science, *summa cum laude* - Chemistry**
Eastern New Mexico University
Portales, NM
Research Advisor: Dr. James Russell
Analyzed components of chemical reagents used at a local meat-packing plant.

CAREER POSITIONS

2013-present Executive Director, ReImagine Science

Continuing the convening work of Yámana Science and Technology while adding specific change-processes, including u.lab learning cohorts, Third Space interactive dialogs, and Global CoLab Salons. TEDx and Connected Learning are key foci as platforms for change. Our large network of connections, collaborations and contacts in key scientific organizations and agencies is a key aspect of our multi-stake-holder approach to change.

2008-2013 President, Yámana Science and Technology

Co-Founder, Yámana Science and Technology, based in Washington DC (incorporated December 2008). Work included identifying emerging trends in technology and science, working with academia, Silicon Valley, and the corporate sector. Engaged in hosting and participating in dialogs between stakeholders for science, including science-interested members of the public, scientists, policy-makers, and granting agencies to share new information and evolve new ideas regarding scientific training and research in the United States. Re-named ReImagine Science in 2014.

2013 Research Lead, Åbo Akademi Turku, Finland (visiting scholar)

Analysis of genome inheritance patterns in microbial genomes. Using computational processes to organize and correlate whole genome protein sets for pattern recognition and phylogenomic relationships. Evolutionary relationships between near-neighbor genomes used to develop model of cooperative evolution.

2005-2009 Research Scientist, Computational Genome Analysis

Genome finishing and annotation of the soil microbe *Dechloromonas aromatica*, capable of anaerobic benzene degradation. Intensive hands-on creation and analysis of HMM profiles to understand the unique abilities of this organism in signal transduction and anaerobic aromatic catabolism. Metabolic and signaling profiles of *D. aromatica* proposed through in-depth analysis of phylogenomic profiles for signature protein sequences.

2003-2005 Research Investigator University of California, Berkeley, CA

Genome finishing at the Joint Genome Institute, Walnut Creek, CA. Detection of metabolic intermediates for novel anaerobic pathways in *Dechloromonas aromatica*. Genomic protein data analysis using computational tools (HMMs, TIGR, COG, IPR and KEGG gene models, tree-building) provided by collaborations with Adam Arkin's Virtual Institute for Microbial Stress and Survival and with Kimmen Sjölander's Phylogenomics Group, UC Berkeley under the program of John Coates, Plant and Microbial Biology. Completed genome sequence of *Dechloromonas aromatica*, including gap closure, ambiguity resolution, and assembly. Mass spectroscopy detection of metabolic intermediates in BTEX degradation pathways.

2000-2002 Scientific Specialist Celera Genomics, Rockville, MD

Presented theoretical basis and scientific tools for the whole genome shotgun sequencing protocol used by Celera Genomics in National and International presentations. Presented annotation process based on Hidden Markov Model family phylogenies and sub-family functional predictions. Provided training for pharmaceutical and academic research laboratories on bioinformatics analytic tools. Beta tester for the Celera data interface and Genome Browser. Organized initial launch of Genome Browser to commercial and academic users. Perkin Elmer Corporation SPOT Award for outstanding effort, achievement, and leadership, Celera Genomics. See Motley Fool's Post of the day for scientific presentation ([see http://www.fool.com/Server/FoolPrint.asp?File=/community/pod/2000/001130.htm](http://www.fool.com/Server/FoolPrint.asp?File=/community/pod/2000/001130.htm))

1993-1999 Faculty, Department of Chemistry Georgetown University, Washington, DC

Clare Boothe Luce Chair, Department of Chemistry, Georgetown University. Ran a research laboratory training 3-4 graduate and 2-3 U/G students per semester. Cell biology research focus: protein secretion across the mammalian rough endoplasmic reticulum. With student Jordan Stockton (awarded PhD with honors June 2001), discovered novel protein complex involved in translocation and misinsertion of prion proteins. Teaching duties: Inorganic/Organic/Biochemistry, Enzyme Mechanisms, and Biochemistry Laboratory Techniques.

1980-1982 Research Assoc. Lawrence Livermore National Laboratories, Biomed Division

Studied histone and protamine complexes involved in DNA packaging. Computer tomography fluorescent dye quantitation of DNA in isolated cells.

1979-1980 Skills Training Employment Program (STEP) employee Los Alamos Scientific Laboratories, NM

Competitive awardee for STEP position (Skills Training Employment Position) designed for post-graduate hands-on research in national laboratory setting. Team member in building proto-type Inductively Coupled Plasma spectrometer for detection of trace metals in diverse ecological samples. Lead scientist for PMT design-build in prototype detection array.

PUBLICATIONS AND POSTER ABSTRACTS

K.K. Salinero (2018) "Relmaging Science and the Ivory Tower" Change: The Magazine of Higher Learning, 50:1, 38-46.

K.K. Salinero, K. Keller, W.S. Feil, H. Feil, S. Trong, G Di Bartolo, A. Lapidus (2009) "Metabolic analysis of the soil microbe *Dechloromonas aromatica* str. RCB: indications of a surprisingly complex life-style and cryptic anaerobic pathways for aromatic degradation" BMC Genomics. 2009 Aug 3;10:351

J. D. Coates, J. L. Pollock, R. Chakraborty, K. V. Kellaris, and L. A. Achenbach (2004) "Anaerobic Microbial Metal Redox Cycling by Members of the Beta Proteobacteria" Abstract for presentation at the DOE-NABIR workshop, March 15-17, Warrenton VA.

J.D. Stockton, M.C. Merkert and K.V. Kellaris (2003) "A Complex of Chaperones and Disulfide Isomerases Occludes the Cytosolic Face of the Translocation Protein Sec61p and Affects Translocation of the Prion Protein" Biochemistry 44, 12821-12834.

J.D. Stockton and K.V. Kellaris (1999) "Purification and Characterization of a Novel Factor from the Mammalian Translocation Complex" Abstract for presentation at the American Society for Biochemistry and Molecular Biology Meeting, May 16-20, 1999, San Francisco, CA.

S.M. O'Connor, M.C. Merkert, and K.V. Kellaris (1997) "Electrochemical Detection of a Dithiol Crosslinking Reagent to Better Define the Signal Sequence Binding Domain of SRP54" Abstract for presentation at the 17th International Congress of Biochemistry and Molecular Biology, August 24-29, 1997, San Francisco, CA.

J.D. Stockton and K.V. Kellaris (1997) "Elucidation of the ER Membrane Components Associated with Protein Translocation" Abstract for presentation at the 17th International Congress of Biochemistry and Molecular Biology, August 24-29, 1997, San Francisco, CA.

R. Gilmore and K.V. Kellaris (1992) "Translocation of Proteins Across and Integration of Membrane Proteins Into the Rough Endoplasmic Reticulum" Annal N.Y. Acad. Sci. 674, 27-37.

K.V. Kellaris, S. Bowen, and R. Gilmore (1991) "ER Translocation Intermediates Are Adjacent to a Nonglycosylated 34-kD Integral Membrane Protein" J. Cell Biol. 114, 21-33.

K.V. Kellaris, S. Bowen, and R. Gilmore (1991) "Identification of an Integral Membrane Protein That Can Be Cross-linked to Nascent Polypeptides Undergoing Translocation Across the Endoplasmic Reticulum" Abstract for presentation at the Keystone Symposium on Translational Control, Feb. 22-Mar. 11, 1991, Tamarron, CO

R. Gilmore, P. Collins, J. Johnson, K.Kellaris, and P. Rapiejko (1991) "Transcription of Full-length and Truncated mRNA Transcripts to Study Protein Translocation across the Endoplasmic Reticulum" in *Methods in Cell Biology*, A.M. Tartakoff, editor, pp. 224-237, Academic Press, Inc. San Diego, CA.

K. Kellaris (1989) "Identification of a Disulfide Between Cysteine 214 and Cysteine 277 in the Beta subunit of Native (Na⁺+K⁺) ATPase" Biochem. Biophys. Res. Comm. 162, 64-70.

K. Kellaris and D. Ware (1989) "Assessment of the Number of Free Cysteines and Isolation and Identification of Cysteine-Containing Peptides from Acetylcholine Receptor" *Biochemistry* 28, 3469-3482.

K. Kellaris (1988) "Isolation and Identification of Disulfide Containing Peptides for Acetylcholine Receptor" Abstract for presentation at the 72nd annual FASEB meeting, May 1-5, 1988, Las Vegas, NV.

R. Balhorn, K. Kellaris, M. Corzett, and C. Clancy (1985) "7-Aminoactinomycin D Binding and the Final Stages of Sperm Chromatin Processing in the Mouse" *Gamete Res.* 12, 411-422.

C. Apel, D. Duchane, B. Palmer, T. Bienewski, J. Peña, L. Cox, D. Gallimore, K. Vincent (Kellaris) M. Lopez, J. Kline and D. Steinhaus (1980) "Top-Down Viewing of the Inductively Coupled Plasma Using a Dual-Grating, Direct Reading Spectrograph and an All-Mirror Optical System" Abstract for presentation at the International Winter Conference on Developments in Atomic Plasma Spectrochemical Analyses, Jan. 7-11, 1980, San Juan, Puerto Rico.

HONORS

Leadership Palo Alto class of 2018, Perkin Elmer Corporation SPOT Award for outstanding effort, achievement, and leadership, Celera Genomics, Clare Boothe Luce Chair, Department of Chemistry, Georgetown University, UCSD Outstanding Teaching Assistant, ENMU Graduation with Honors - *Summa cum Laude*, Phi Kappa Phi Honor Society, Outstanding Student in Quantitative Analysis, Dean's Honor Roll (all semesters), United States Presidential Scholar (Finalist), National Merit Scholar (Finalist)

CONFERENCE ORGANIZING & FACILITATION

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|----------------|--|
| 2020-2021 | 500WomenScientists NorCal/Bay area pod co-lead |
| 2020-2021 | Convener, Connected Learning Journey Scientific Stakeholders group |
| 2020-2021 | TEDCountdown TEDxReImagineScience curator |
| 2020 | TEDCountdown TEDxCrescentPark licensee |
| 2019 | Societal Transformation Lab Science Hub, U.lab |
| 2019 | Design Lab Workshop, Bodega Marine Laboratory: Ocean Resilience - Exploring the Human System |
| 2018 - 2020 | TEDxCrescentParkLive - licensee |
| 2018 | Science of Team Science: "Establishing Trust in a Distributed Team to Cultivate Change" workshop/panel |
| 2017 | u.lab Science Hub learning Journey (Sep through Dec) |
| 2017 | TEDGlobal 2017 Palo Alto - host |
| 2016 | ReImagine Science and Social Presencing, Estes Park Retreat |
| 2016 | TEDxLivermore, Speaker Curator, Licensee "The Economics of Empathy" |
| 2016 | Franchise for Humanity, Jikoji Retreat Center |
| 2015 | Franchise for Humanity, Stanford University and The Institute for the Future CA |
| 2015 | TEDxLivermoreWomen, i-Gate Livermore CA |
| 2015 | Global Education Futures Forum, part of Global Technology Summit Palo Alto CA |
| 2014 | TEDxLivermore, Speaker Co-Curator "UnCork Your Creativity" Livermore CA |
| 2014 | TCP-IP 40th Anniversary Celebration Picnic Palo Alto CA |
| 2014 | Franchise for Humanity, part of Global Innovation Summit, Stanford University CA |
| 2013 | Mapping the Systems of Science and Technology, Presidio, CA |
| 2013 | TEDxLivermore, Speaker Curator "Innovate + Educate" Livermore CA |
| 2012 | Science 'UnSummit' 2012*, Arlington VA |
| 2011 | Open Science Summit, Mountain View CA |
| 2011 - present | Third Space interactive dialogs on science (various academic and community settings) |
| 2010 | Science 'UnSummit' 2010*, Washington DC |

*part of the USA Science and Engineering Festival

INVITED TALKS and PANELS

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| 2022 | National Youth Science Camp workshop session (3 days) Title: <i>Is Everyone a Scientist?</i> |
| 2022 | NextNow Presentation. Title: <i>Collective Practices for Transforming What it is to Be a Scientist</i> |
| 2022 | Science of Team Science Lightning talk. Title: <i>Exploring Entanglements between Team Competencies and Team Failures</i> , with Caroline Frietag, Julie Thompson Klein, and Don Takehara, https://vimeo.com/733777142/ce19e6d78e |
| 2021 | National Youth Science Camp session. Title: <i>Where is the wilderness in science?</i> |
| 2021 | Educating for Careers presentation Title: <i>Connecting the Dots: Whole Child, Whole Adult, Whole World</i> , with David Militzer and Deborah Hale |
| 2020 | Featured in the documentary <i>Bigger, Faster, Smarter (Part3): Human-Cyborg Relations (In Search of Civilization)</i> https://youtu.be/ijw0sLkF3tg |

2020 Intereach Science of Team Science talk Title: Teamwork and the Tech Sector

2020 Science of Team Science Title: Learning Our Way into Team Behaviors: Practices from Engineering and the Tech Sector

2020 Educating for Careers presentation Title: Design Considerations for Student-Centered Career Education for All

2019 Discovery Session, TEDSummit, Edinburgh Scotland (presenter)
Title: Science in an Age of Heresy

2019 Stanford University Complexity Group Title: The Third Space: Shifting the hierarchy of academia to release the best potential of science

2018 AESIS Research Policy and Strategy panel Ottawa Canada

2018 Pecha Kucha TEDfest organizer's meeting, Manhattan NY

2018 Science of Team Science panel, Galveston TX

2017 Science of Team Science (poster, learning cohort formation)

2015 Institute for the Future with Vint Cerf, panelist on Ethics and AI, Palo Alto CA

2015 UC Berkeley Symposium on Collaboration
Title: The Art of Collaboration (**Keynote**)

2015 Stanford Medical School Scholars Association Career Day (**Keynote**)

2014 In2Thinking Succeed with Inquiry, Los Angeles CA
Title: Science and the Fragility of Knowledge

2014 InterUniversity Center, Dubrovnik - Collaboration for Impact

2013 Mapping the Systems of Science and Technology Open Space host

2012 Dream makers and Risk Takers Award Luncheon, Livermore CA (**Keynote**)

2012 UC Berkeley Leadership and Management Chem 268 (**Keynote**)

2012 UC Berkeley Integrative Biology Women in Science Third Space
Title: Future of Science, Your Future in Science

SERVICE TO PROFESSION

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| 2017-2020 | Presencing Institute (MIT) u.lab science hub |
| 2018 | Advanced Authentic Research Mentor, Palo Alto HS |
| 2015 - 2018 | NSF grant review panelist |
| 2013, 2014, 2015 | Judge, East Bay Innovation Awards, East Bay EDA |
| 2015 | Stanford MediaX Lab Leadership Bootcamp, Domain expert (Spring, Fall) |
| 2015 | Judge, Health Occupation Students of America State Conference, CA |
| 2013-present | UC Entrepreneurship Academy, UCDavis, Domain expert |

BOARD MEMBERSHIP

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| 2022 | TRaCES (Track, Report, Connect, Exchange) Transborder project Prof Paul Yachnin, McGill University, member of management team. |
| 2015-present | East Bay Economic Development Alliance Business & Employer Resources Committee |
| 2015-2018 | Global CoLab Network 501(c)3 Annandale VA |
| 2013-2017 | California Health Medical Reserve Corps - founding board member Bay Area CA |
| 2012-2016 | Innovation Tri-Valley Leadership Group - leadership board member East Bay CA and STEM Education Committee |
| 2011-2016 | Knowledge Federation - a global consortium on knowledge creation |
| 2012 | Avatar Research Institute - advisory board member Washington DC |
| 2008-2013 | Yámana Science and Technology/ReImagined Science 501(c)3 - President of the Board |
| 2013-present | ReImagined Science – Board Member as Executive Director |