Kenneth M. Stedman

# Professor, Biology Department, Center for Life in Extreme Environments

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**Education:** B.Sc. Chemical Engineering, Stanford University, 1987

Ph.D.Molecular and Cell Biology, University of California, Berkeley, 1996

**Honors and Awards:**

Oregon Museum of Science and Industry Science Communication Fellow, 31 Aug. 2017

Portland State University Foundation Philanthropic Cultivation Award, 18 June 2017

Finalist: Golden Mole Award for Accidental Brilliance, National Public Radio, 1 March, 2016

Suzanne Ott Prather Memorial Lecturer. 26 Feb 2015.

Most Improved Elevator Pitch – Lab2Market, 14 Aug 2013

Biomed Central Research Award (best paper in 2012 in BioMedCentral Journals)

Biomed Central Research Category Award ‘Computational and high-throughput studies in genomics and systems biology’ 2012

Chair (Elected) of Gordon Research Conference on Archaea, 2011

Alexander von Humboldt Research Fellowship, 2009-2011

John Eliot Allen Outstanding Teacher Award, 2003-2004

NSF-NATO Postdoctoral Fellowship, 1998-1999

Marie Curie Postdoctoral Research Fellowship, 1996-1998

Outstanding Graduate Student Instructor award, 1991. (nominated 1994)

Milton I. and Florence Krenz Mack Neurology Research Fund Fellowship 1990-1991

**Employment and Experience:**

12/14-present Co-Founder and Chief Scientific Officer of StoneStable Inc.

9/14-present Professor, Biology Department, Portland State University

1/14-present Affiliate Professor, Biochemistry and Molecular Biology Department, Oregon Health and Science University, Portland, Oregon, U.S.A.

9/01-9/14 Assistant then Associate Professor with tenure, Biology Department, Portland State University, Portland, Oregon, U.S.A.

5/00-9/01 Senior Research Fellow with Professor Mark Young, Thermal Biology Institute Montana State University, Bozeman, Montana, U.S.A.

1/00-5/00 Research Fellow with Professor John van der Oost, Bacterial Genetics Group, Microbiology Department, Wageningen University, The Netherlands.

11/98-11/99 NSF-NATO Post-doctoral Research Fellow with Professor Wolfram Zillig, Max-Planck Institute for Biochemistry, Martinsried, GERMANY.

10/96-10/98 Marie-Curie Post-doctoral Research Fellow with Professor Wolfram Zillig

at the Max-Planck Institute for Biochemistry, Martinsried, GERMANY.

8/90-6/96 Graduate Student Researcher with Professor Sydney Kustu, Department of

Molecular and Cell Biology. University of California, Berkeley, U.S.A.

9/87-6/90 Biotechniker: Sandoz Pharma, Ltd. Basel, SWITZERLAND

6/86-9/86 Research Associate: Genentech, Inc, South San Francisco, U.S.A.

**Languages:** English mother tongue

German and French fluent spoken and written

**Citizenship:** U.S.A., Great Britain.

**Birthplace**: Norwich, England. October 13, 1965.

## Current Grants (~$725,000 external to PSU as PI):

* NASA at My Library Tuition Scholarship to OMSI Science Communication Fellowship Program. $1500 Fall 2017.
* 80NSSC17K0301 The Emergence of Chimeric RNA-DNA Viruses: NASA Exobiology Phase 2 proposal. Proposed Dates: 07/01/17-06/30/20. $602,601 Requested. Selected 10 May 2017. Intrinsic Merit “Excellent”. Budget reduced 10% to $542,341.
* OPP1161931 “Point of Collection Silica-Coating and Preservation of Stool Samples.” Bill and Melinda Gates Foundation, Grand Challenges Explorations Program. 1 Nov. 2016 – 30 Apr. 2018. $100,000. Notification of award: 6 Oct. 2016
* 1R41AI126940-01 “Stabilization of Influenza Vaccine by Silica-coating.” STTR with StoneStable, Inc. Proposed Dates: 1 July 2016-30 June 2017. Award issue date: 12 Aug 2016. $224,993 Total: Subcontract to PSU: $70,124. No cost extension to Aug 2018.
* RDHV-Rep Proteins, Expression and Activity Testing. PSU Faculty Enhancement Grant 1 July 2016-30 June 2018. $15,000.

## Previous Grants and Fellowships (ca. 4.6 M$ external funding at PSU as PI or CoI)

## See below for details.

**Grant proposals pending:**

* MCB1818185 “Collaborative Research: Structural and Genetic Approaches to Understanding Virus Assembly and Host Interactions in Extreme Environments.” Proposed dates 1 Sept. 2018-30 Aug. 2021. $444,120 Requested, Submitted on 20 Nov. 2017. (Collaborator Marc Morais, UT Medical Branch).

## Original Peer Reviewed Research Articles: (38)

38. E. A. Iverson, D. A. Goodman, M. E. Gorchels, and K. M. Stedman. Genetic Analysis of the Major Capsid Protein of the Archaeal Fusellovirus SSV1: Mutational Flexibility and Conformational Change. (2017) *Genes*, **8(12)**, 373. DOI: 10.3390/genes8120373

37. E. A. Iverson, D. A. Goodman, M. E. Gorchels, and K. M. Stedman. Extreme mutation tolerance: Nearly half of the archaeal Fusellovirus SSV1 genes are not required for virus function, including the minor capsid protein gene vp3. (2017) *J. Virology,* **91:10**, Manuscript online 1 Feb 2017. PMID: 28148789. e02406-16. DOI:10.1128/JVI.02406-16

* Highlighted in “Spotlight”, one of 5 articles selected from that issue for special interest.
* On the cover
* https://www.asm.org/index.php/mbiosphere/item/6429-the-surprising-plasticity-of-the-ssv1-archaeal-viral-genome
* http://www.news-medical.net/news/20170323/PSU-research-shows-how-viruses-can-undergo-major-mutations-without-losing-ability-to-infect.aspx

36. S. Lim, S. T. Lance, K.M. Stedman and A. Abate. PCR-activated cell sorting for characterizing virus-host relationships. (2016) *J. Virological Methods.*  **242**: 14-21 doi: 10.1016/j.jviromet.2016.12.009

35. S. T. Lance, D. J. Sukovitch, K.M. Stedman and A. R. Abate. Peering Below the Diffraction Limit: Robust and Specific Sorting of Viruses with Flow Cytometry. (2016) *Virology J*.**13**:201 doi: 10.1186/s12985-016-0655-7

34. Annie R. Lindgren,  Bradley A. Buckley, Sarah M. Eppley, Anna-Louise Reysenbach, Kenneth M. Stedman, and Josiah T. Wagner. Life on the Edge—the Biology of Organisms Inhabiting Extreme Environments: An Introduction to the Symposium. *I*ntegr. Comp. Biol. (2016) 56 (4): 493-499 doi:10.1093/icb/icw094

* Featured on the cover

33. G. S. Diemer and K. M. Stedman. Modeling Microvirus Capsid Protein Evolution Utilizing Metagenomic Sequence Data. *J Mol Evol*. 2016 Aug;83(1-2):38-49. doi: 10.1007/s00239-016-9751-y. Epub 2016 Jul 6.

1. K. M. Stedman, M. DeYoung, M. Saha, M. B. Sherman, and M. C. Morais. Structural Insights into the Architecture of the Hyperthermophilic *Fusellovirus* SSV1 (2015). *Virology*, **474**, 105-109. Published online 14 Nov. 2014. (On the Cover) doi: 10.1016/j.virol.2014.10.014. PMID 25463608

* On the cover
* <http://www.pdx.edu/news/portland-state-university-virus-discovery-could-impact-hiv-drug-research>
* <http://koin.com/2014/11/19/psu-biologists-discover-hiv-like-virus/>
* <http://www.oregonlive.com/portland/index.ssf/2014/11/psu_professor_unlocks_virus_th.html>

1. G. Kminek, C. Conley, C. Allen, D. Bartlett, D. Beaty, L. Benning, R. Bhartia, P. Boston, C. Duchaine, J. Farmer, G. Flynn, D. Glavin, Y. Gorby, J. Hallsworth, R. Mogul, D. Moser, P.B. Price, R. Pukall, D. Fernandez-Remolar, C.L. Smith, K. Stedman, A. Steele, R. Stephanauskas, H. Sun, J. Vago, M. Voytek, P.S. Weiss, and F. Westall. (2014) Report of the Life Detection Workshop for Samples from Mars, *Life Sciences in Space Research*. **2**, 1-5 doi: 10.1016/j.lssr.2014.05.001

30. J. Laidler, J. A. Shugart, S. Cady, K. S. Bahjat and K. M. Stedman. (2013) Reversible Inactivation and Desiccation Tolerance of Silicified Viruses. *J.Virology*, **87/24**, 13927-13929 published online 9 Oct. 2013 doi: 10.1128/JVI.02825-13

* <http://motherboard.vice.com/blog/zombie-viruses-could-be-a-clue-to-life-on-other-planets>
* <http://www.astrobio.net/exclusive/5812/glassy-coating-keeps-viruses-happy-in-harsh-environments>
* http://www.nytimes.com/2013/12/24/health/preserving-vaccines.html?ref=health&\_r=3&
* New York Times, 24 Dec, 2013
* Discussed in This Week in Virology, #266, <http://www.twiv.tv/>
* http://www.pdx.edu/magazine/news/zombie-viruses

29. K. Stedman. Mechanisms for RNA capture by ssDNA viruses: Grand Theft RNA! (2013) *Journal of Molecular Evolution*, **76/6** 359-364. Published online 20 June 2013 doi: 10.1007/s00239-013-9569-9 (On the cover) PMID: 23784142

28. P. L. Siering, G. V. Wolfe, M. S. Wilson, A. N. Yip, C. M. Carey, C. D. Wardman, R. S. Shapiro, K. M. Stedman, J. Kyle, T. Yuan, J. D. Van Nostrand, Z. He, and J. Zhou.Microbial Biogeochemistry of Boiling Springs Lake: a Physically Dynamic, Oligotrophic, Low pH Geothermal Ecosystem. (2013) *Geobiology* 11/4 356-376. Doi: 10.1111/gbi.12041. PMID: 23679065

27. K. M. Stedman, N. Kosmicki, and G. S. Diemer, Codon usage frequency of RNA virus genomes from high temperature acidic environment metagenomes. (2013) *J. Virology* 87/3 1919 doi: 10.1128/JVI.02610-12. PMCID: PMC3554165

26. R. M. Ceballos, C. D. Marceau, J. O. Marceau, S. Morris, A. J Clore, and K. M Stedman. Differential Virus Host-Ranges of the Fuselloviridae of Hyperthermophilic Archaea: Implications for Evolution in Extreme Environments. (2012) Frontiers in Microbiology. 3: 295 doi:10.3389/fmicb.2012.00295 PMCID: PMC3426928

25. E. Iverson and K. M. Stedman. A genetic study of SSV1, the prototypical fusellovirus. (2012). Frontiers in Microbiology. 3: 200. doi: 10.3389/fmicb.2012.00200*.* PMCID: PMC3367457

24. G. S. Diemer and K. M. Stedman. A Novel Virus Genome Discovered in an Extreme Environment Suggests Recombination between Unrelated Groups of RNA and DNA Viruses. (2012) Biology Direct, **7(1):**13. PMID: 22515485, PMCID: PMC337243 doi:10.1186/1745-6150-7-13 “Highly Accessed”, Published 11 June, 2012.

* Research award for ‘Computational and high-throughput studies in genomics and systems biology’ category in Biomed Central Journals. 22 April, 2013
* 7th annual Biomed Central Research Award. (Best article in BioMedCentral Journals in 2012) 22 April, 2013 : http://www.biomedcentral.com/researchawards/

Covered in :

* New Scientist : http://www.newscientist.com/article/mg21428613.500-first-glimpse-at-the-viral-birth-of-dna.html
* Nature: http://blogs.nature.com/news/2012/04/hot-spring-yields-hybrid-genome.html
* Scientific American: <http://www.scientificamerican.com/article.cfm?id=hot-spring-yields-new-hybrid-viral-genome>
* Discover Magazine – 80 Beats <http://blogs.discovermagazine.com/80beats/2012/04/23/>
* Virology Blog by Vincent Racaniello <http://www.virology.ws/2012/07/19/a-dna-virus-with-the-capsid-of-an-rna-virus/>
* <http://www.youtube.com/watch?v=4_4NbwS-wkY>
* Etc. . . .

23. M. DeYoung, M. Thayer, J. van der Oost, and K.M. Stedman (2011). Growth phase dependent gene regulation *in vivo* in *Sulfolobus solfataricus*. FEMS Microbiology Letters, **321/2**, 92-99. Published online 6 June 2011. DOI: 10.1111/j.1574-6968.2011.02313.x PMID: 21595744

22. J. Laidler and K.M. Stedman (2010) Virus Silicification under Simulated Hot Spring Conditions. *Astrobiology* **10/6**. 569-576. PMID: 20735248

* (On the Cover).
* Editor’s “key” selection
* One of top 10 Astrobiology stories of 2010

21. K.M. Stedman, R. Porter, and M. Dyall-Smith. (2010) The isolation of viruses infecting Archaea, pp57-64. In: S.W. Wilhelm, M.G. Weinbauer and C.A. Suttle [eds], Manual of Aquatic Viral Ecology. Waco, American Society for Limnology and Oceanography doi:10.4319/mave.2010.978-0-9845591-0-7

20. A. Clore and K. Stedman. The SSV1 viral integrase is not essential. (2007) *Virology*, **361**, 103-111. PMID: 17175004

19. R. Barry, M. Young, K. Stedman, E. Dratz. Proteomic Mapping of the Extremophilic Archaeon *Sulfolobus solfataricus* P2. (2006) *Electrophoresis*, **27/14**, 2970-2983 PMID: 16721906

18. G. Erauso, K. M. Stedman, H. J. G. van de Werken, W. Zillig, and J. van der Oost. Two novel conjugative plasmids from a single strain of *Sulfolobus*. (2006) *Microbiology* **152/7**, 1951-1968. PMID: 16804171

17. A. Clore and K. Stedman. Long Inverse PCR using iProof© polymerase. (2005) Bio-Rad Bulletin 5337 Rev A.

16. G. Rice, L. Tang, K. Stedman, F. Roberto, J. Spuhler, J.E. Johnson, T. Douglas, and M. Young. The Structure of a Thermophilic Virus Shows that a dsDNA Viral Capsid Type Spans All Domains of Life. (2004). *Proc. Natl. Acad. Sci*. *U.S.A.* **101/20**, 7716-7720 Published online: PNAS Early Edition, May 3rd, 2004. 10.1073/pnas.0401773101. PMID: 11606757

Listed as a “highlight” in “selected articles” at the PNAS WWW site as “Uprooting the viral tree” http://www.pnas.org/misc/highlights.shtml

Covered in News and Views in Nature (Vol 429, 13 May, 2004, p 147)

Covered in ASM News, Current Topics, Volume 70, Number 9, 2004

Commentary: Roger W. Hendrix Hot new virus, deep connections, (2004). *Proc. Natl. Acad. Sci*. *U.S.A.* **101/20**, 7495-7496

15. B. Wiedenheft, K. M. Stedman, F. Roberto, D. Willits, A. Gleske, L. Zoeller, J. Snyder, T. Douglas, and M. Young. Comparative Genomic Analysis of Hyperthermophilic Archaeal Fuselloviridae Viruses. (2004) *J. Virology*, **78/4**, 1954-1961. PMCID: PMC369504

14. M. Jonuscheit, E. Martusewitsch, K. M. Stedman, and C. Schleper. A Reporter Gene System for the Hyperthermophilic Archaeon *Sulfolobus solfataricus* based on a selectable and integrative shuttle-vector. (2003) *Molecular Microbiol.***48/5**, 1241-1252. PMID: 12787352

13. K. M. Stedman, Q. She, H. Phan, H. P. Arnold, I. Holz, R. A. Garrett, and W. Zillig. Relationships between fuselloviruses infecting the extremely thermophilic archaeon *Sulfolobus*: SSV1 and SSV2. (2003) *Res. Microbiol.* **154/4**, 295-302. PMID: 12798235

12. G. Rice, K. Stedman, J. Snyder, B. Wiedenheft, D. Willits, S. Brumfield, T. McDermott, and M. Young. Viruses from Extreme Thermal Environments. (2001) *Proc. Natl. Acad. Sci.* *U.S.A*. **98/23**, 13341-13345. PMID: 11606757

11. K. M. Stedman, Q. She, I. Holz, H. Singh, R. A. Garrett, and W. Zillig. The pING family of conjugative plasmids from the extremely thermophilic archaeon *Sulfolobus islandicus*: insights into recombination and conjugation in Crenarchaeota. (2000) *J. Bacteriol*. **182/24**, 7014-7020. PMCID: PMC94828

10. H. P. Arnold, Q. She, H. Phan, K. Stedman, D. Prangishvili, I. Holz, J. K. Kristjanson, R. A. Garrett, and W. Zillig. The Genetic Element pSSVx of the Extremely Thermophilic Crenarchaeon *Sulfolobus* is a Hybrid between a Plasmid and a Virus. (1999) *Molecular* *Microbiol.* **34/2**, 217-226. PMID: 10564466

9. K. M. Stedman, C. Schleper, E. Rumpf, and W. Zillig. Genetic Requirements for the Function of the Archaeal Virus SSV1 in *Sulfolobus solfataricus*: Construction and Testing of Viral Shuttle Vectors. (1999) *Genetics*, **152/4**, 1397-1405. PMCID: PMC1460719

8. D. Prangishvili, S.-V. Albers, I. Holz, H. P. Arnold, K. Stedman, T. Klein, H. Singh, J. Hiort, A. Schweier, J. K. Kristjansson, and W. Zillig. Conjugation in Archaea: Frequent Occurrence of Conjugative Plasmids in *Sulfolobus*. (1998) *Plasmid*, **40/3**, 190-202. PMID: 9806856

7. Q. She, H. Phan, R. A. Garrett, S.-V. Albers, K. M. Stedman, and W. Zillig. Genetic Profile of pNOB8 from *Sulfolobus*: the first conjugative plasmid from an archaeon. (1998) *Extremophiles* **2/4**, 417-425. PMID: 9827331

6. W. Zillig, H. P. Arnold, I. Holz, D. Prangishvili, A. Schweier, K. Stedman, Q. She, H. Phan, R. Garrett, and J. K. Kristjansson. Genetic Elements in the Extremely Thermophilic Archaeon *Sulfolobus*. (1998) *Extremophiles*, **2/3**, 131-140. PMID: 9783157

5. M. Nohaile, D. Kern, D. Wemmer, K. Stedman, and S. Kustu. Structural and Functional Analyses of Activating Amino Acid Substitutions in the Receiver Domain of NtrC: Evidence for an Activating Surface. (1997) *J.Mol.Biol.* **273**, 299-316. PMID: 9367763

4. K. E. Klose, A. K. North, K. M. Stedman, and S. Kustu. The Major Dimerization Determinants of the Nitrogen-Regulatory Protein NTRC from Enteric Bacteria lie in its Carboxy-terminal Domain. (1994) *J.Mol.Biol.* **241**, 233-245. PMID: 8057363

3. A. K. North, K. E. Klose, K. M. Stedman, and S. Kustu. Prokaryotic Enhancer-Binding Proteins Reflect Eukaryote-Like Modularity: the Puzzle of Nitrogen Regulatory Protein C. (1993) *J. Bacteriol.* **175**, 4267-4273. PMCID: PMC204865

2. G. Spik, B. Haendler, O. Delmas, C. Mariller, M. Chamoux, P. Maes, A. Tartar, J. Montreuil, K. Stedman, H. P. Kocher, P. C. Hiestand, and N. R. Movva. A Novel Secreted Cyclophilin-like Protein (SCYLP). (1991) *J. Biol. Chem.* **266**, 10735-10738. PMID: 2040592

1. G. S. Tyndall, K. M. Stedman, W. Schneider, J. P. Burrows, and G. K. Moortgat. The Absorption Spectrum of ClNO between 190 and 350 nm. (1987) *J. Photochemistry* **36**, 133-139.

### Published Abstracts: (11)

11. Kenneth Stedman. Viruses from high temperature environments. (2013) XII Congresso Nacional de Virología, Burgos 2013. Virología **16/2** : 83

10. Jennifer Kyle, Linda Jahnke, and Kenneth M. Stedman. Preservation Potential of Lipid-containing Viruses under Silicifying Conditions. Abstract #2228. 43rd Lunar and Planetary Science Conference, (19-23 March, 2012, Woodlands Texas.) http://www.lpi.usra.edu/meetings/lpsc2012/pdf/2228.pdf

9. K. Stedman and B. Blumberg. Astrovirology (2008) *Astrobiology* **8/2**: 316

8. A. J. Clore. and K. Stedman Whole genome sequencing of extreme Fuselloviruses and their biogeography (2008) *Astrobiology* **8/2**: 316

7. J. Laidler and K. Stedman. Silicification of Viruses in a Simulated Hydrothermal Environment (2008) *Astrobiology* **8/2**: 317

6. C. Marceau, K. Blair, B. Wombold. R. M. Ceballos, M. Ceballos, K. Stedman Sulfolobus Spindle-shaped Viruses and Host Cross-Infection Studies. (2008) *Astrobiology* **8/2**: 318

5. K. Stedman, Viruses from Extreme Environments (2005) *Geochim Cosmochim Acta* **69/10**: A36-A36 Suppl. S MAY

4. K. Stedman, and B. Blumberg The NAI Virus Focus Group. (2005) *Astrobiology* .**5/2**, 178.

3. K. Stedman, G. Rice, L. Tang, J.E. Johnson, and M. Young. Ancient Viruses from Extreme Environments? (2005) *Astrobiology* .**5/2**, 267-268.

2. D. Wemmer, D. Kern, M. Nohaile, B. Volkman, S. Kustu, and K. Stedman, NMR studies of receiver domain activation: NTRC (1997*) Abstracts of Papers of the American Chemical Society* **214**: 203-Phys Part 2.

1. K. M. Stedman, A.K. North, K.E. Klose, and S.G. Kustu, Dimerization of NTRC - How and Why? (1994) *J. Cellular Biochem.* **65-65** Suppl. 18c

### Review articles, Book Chapters, and Thesis: (21)

21. A. J. Berliner, T. Mochizuki, and K.M. Stedman. Astrovirology: Viruses at Large in the Universe. (2018) *Astrobiology*, **18/2**, doi: 10.1089/ast2017.1649 (on the cover)

* <https://slate.com/technology/2018/01/nasas-been-ordered-to-search-for-life-in-space-they-should-start-with-viruses.html> (17 Jan 2018)
* <https://www.eurekalert.org/pub_releases/2018-01/psu-vae011818.php> (18 Jan 2018)
* <https://gizmodo.com/our-universe-could-be-littered-with-alien-viruses-and-w-1822232430> (19 Jan 2018)
* <http://metro.co.uk/2018/01/19/killer-alien-space-viruses-wipe-humanity-may-terrifyingly-common-universe-researchers-warn-7243631/> (19 Jan 2018)
* <http://www.astronomy.com/news/2018/01/the-hunt-for-viruses-in-space> (22 Jan 2018)
* <https://nypost.com/2018/01/22/biologists-believe-finding-viruses-is-first-step-to-finding-aliens/> (22 Jan 2018)
* <https://www.livescience.com/61515-astrovirology-viruses-at-large.html> (24 Jan 2018)

20. K.M. Stedman. Deep Recombination: RNA and ssDNA virus genes in DNA virus and host genomes. (2015) *Annu. Rev. Virol*. **2**:203-217. (Invited review). Doi: 1-/1146/annurev-virology-100114-055127. Available online 2 September 2015, Published Nov. 2015.

19. K.M. Stedman. Into the Devil’s Kitchen : A Personal History of Archaeal Viruses. In *Life in Our Phage World*. (2015) F. Rohwer, M. Youle, H. Maughan, N. Hisakawa. 7-28:7-39. Wholon, San Diego. ISBN: 978-0990494300

18. K.M. Stedman (2015) Virus – Long Entry. In: *Encyclopedia of Astrobiology, 2nd edition* (M. Gargaud, R. Amils, J. Cernicharo Quintanilla, H.J. Cleaves II, W.M. Irvine, D.L. Pinti, and M. Viso. Eds). 1745-1748, Springer, Heidelberg DOI 10.1007/978-3-642-27833-4\_1660-3

17. K. Stedman Fusellovirus, Fuselloviridae. (2012) In *The Springer Index of Viruses, Second Edition.* Editors: C. Tidona and G. Darai. Springer Verlag, Heidelberg. DOI 10.1007/978-0-387-95919-1

16. K.M. Stedman (2011) Virus – Long Entry. In: *Encyclopedia of Astrobiology* (M. Gargaud, R. Amils, J. Cernicharo Quintanilla, H.J. Cleaves II, W.M. Irvine, D.L. Pinti, and M. Viso. Eds). 1745-1748, Springer, Heidelberg

15. K. M. Stedman. (2008) The Fuselloviruses of Archaea. In: *Encyclopedia of Virology, Third Edition* (B. W. J. Mahy and M.H.V. Van Regenmortel Eds). 296-300 Elsevier, Oxford.

14. K. M. Stedman. (2007) Plasmids and Cloning vectors for Thermophilic Archaea, In: Prokaryotes from Geothermal Environments: Biology and Technology (F. Robb, A. Driessen, G. Antranikian, D. Grogan Eds). Chapter 11. CRC Press, Boca Raton.

13. K. M. Stedman, A. Clore and Y. Combet-Blanc. (2006) *Biogeographical Diversity of Archaeal Viruses****,*** In: *SGM symposium 66:* *Prokaryotic diversity: mechanisms and significance*(N. A. Logan, H.M. Pappin-Scott, and P.C.F. Oynston Eds). 131-144. Cambridge University Press, Cambridge.

12. K. M. Stedman, D. Prangishvili, and W. Zillig. (2005) *Viruses of Archaea*, In: *The Bacteriophages, 2nd Edition*. (R. Calendar Ed.), 499-516. Oxford University Press, New York.

11. K. Stedman and B. S. Blumberg. The NASA Astrobiology Institute Virus Focus Group Workshop and Field trip to Mono and Mammoth Lakes, CA June 22-24, 2004. (2005) *Astrobiology* **5/4**, 441-443

10. S. J.J. Brouns, T. J.G. Ettema, K. M. Stedman, J. Walther, H. Smidt, A. P.L. Snijders, M. Young, R. Bernander, P. C. Wright, B. Siebers, and J. van der Oost. *The hyperthermophilic archaeon Sulfolobus - from exploration to exploitation*. (2005) In: *Geothermal Biology and geochemistry in Yellowstone National Park: proceeding of the Thermal Biology Institute Workshop, Yellowstone National Park, WY, October 2003* (W.P. Inskeep and T.R. McDermott, Eds), 261-276. Montana State University Publications, Bozeman, Montana.

9. Stedman, K., Prangishvili, D. and Zillig, W. (2005). *Lipothrixviridae*. In: *Virus Taxonomy*, VIIIth Report of the ICTV (C.M. Fauquet, M.A. Mayo, J. Maniloff, U. Desselberger, and L.A. Ball, eds), 95-102. Elsevier/Academic Press, London.

8. Stedman, K. and Prangishvili, D. (2005). *Rudiviridae*. In: *Virus Taxonomy*, VIIIth Report of the ICTV (C.M. Fauquet, M.A. Mayo, J. Maniloff, U. Desselberger, and L.A. Ball, eds), 103-106. Elsevier/Academic Press, London.

7. Stedman, K. (2005). *Fuselloviridae*. In: *Virus Taxonomy*, VIIIth Report of the ICTV (C.M. Fauquet, M.A. Mayo, J. Maniloff, U. Desselberger, and L.A. Ball, eds), 107-110. Elsevier/Academic Press, London.

6. Stedman, K. (2005). *Guttaviridae*. In: *Virus Taxonomy*, VIIIth Report of the ICTV (C.M. Fauquet, M.A. Mayo, J. Maniloff, U. Desselberger, and L.A. Ball, eds), 115-116. Elsevier/Academic Press, London.

5. J. C. Snyder, K. Stedman, G. Rice, B. Wiedenheft, , J. Spuhler, and M. J. Young. Viruses of Hyperthermophilic Archaea. (2003) *Res. Microbiol* **154** 474-482.

4. K. Stedman and W. Zillig. Genus: Fusellovirus. (2002) In *The Springer Index of Viruses* Editors: C. Tidona and G. Darai. Springer Verlag, Heidelberg. http://www.springer.de/viruses/.

3. D. Prangishvili, K.M. Stedman, and W. Zillig. Viruses of the extremely thermophilic archaeon *Sulfolobus*. (2001) *Trends in Microbiology* **9/1**, 39-43.

2. H. P. Arnold, K. M. Stedman, and W. Zillig. Archaeal phages. (1999) In *The* *Encyclopedia* *of* *Virology, Second Edition*. Editors: A. Granoff and R.G. Webster. Academic Press, London 76-89.

1. K. M. Stedman. Monomer-Monomer, Dimer-Dimer, and Protein-Protein Interactions of the Enhancer Binding Protein, NTRC. (1996) Ph.D. Thesis, University of California, Berkeley.

**Patents:**

1. J.R. Laidler, K. S. Bahjat, and K. M. Stedman. Immunogenic compositions comprising silicified virus and methods of use. Patent pending, filed 31 Jan 2014. PCT/US2014/014284 <http://www.google.com/patents/WO2014121132A1?cl=en>

* Licensed for Field of Use to Trogenex, Inc. 11 Feb. 2015.
* Exclusive option for field of use to StoneStable, Inc. 11 March 2015
* Application published 17 Dec, 2015 : US-2015-0359871-A1
* Pending worldwide

**Manuscripts in Preparation:**

* G.S. Diemer and K. M. Stedman. Comparative Viral Metagenomics of an Extreme Microbial Ecosystem, in preparation for PLoS One.
* J. Kyle, L. Jahnke, M. Parenteau, and K. Stedman. Differential viral lipid biosignatures.
* R. Michael Ceballos, Caleb D. Marceau, Joshua O. Marceau, Coyne Drummond, and Kenneth M. Stedman. SSV-K1, a lytic Fusellovirus.
* K. Stedman and J. van der Oost. Heterologous expression of genes from hyperthermophilic Archaea in hyperthermophilic Archaea.
* S. Morris, R. Diessner, S. Lee, and K. Stedman. Stability of hyperthermophilic viruses.
* Sandes, M. Herrera, R. Diessner, N. Kurosawa, and K. Stedman. *Sulfolobus mobilis*, a new species of Sulfolobus with a hypermotile phenotype.

**Manuscripts in Revision:**

* D.A. Goodman, and K.M. Stedman. Comparative Genetic and Genomic Analysis of the Novel Sulfolobus Spindle-shaped Virus SSV10. Submitted to Virus Evolution 29 December 2017, reviews returned 6 Feb 2018. Major Revisions.

**Manuscripts in Review:**

* K. Tsuboi, H.D. Sakai, N. Nur, A. Suwanto, K.M. Stedman, and N. Kurosawa. *Sulfurisphaera javensis* sp. nov., a thermoacidophilic archaeon isolated from Indonesian hot spring, and reclassification of *Sulfolobus tokodaii* as *Sulfurisphaera tokodaii* comb. nov. International Journal of Systematic and Evolutionary Microbiology. Minor revisions requested 24 Jan 2018, Revised manuscript submitted 12 Feb 2018.

**Online Resources Provided:**

* Geoffrey S. Diemer, Jennifer E. Kyle and Kenneth M. Stedman. Counting viruses using polycarbonate Track EtchTM membrane filters as an alternative to AnodiscTM membrane filters. Posted to Web, 6 July 2012 <http://web.pdx.edu/~kstedman/PCTE_virus_counting_protocol.pdf>
* SSV-L (SSV-10) genome sequence: Genbank accession number KY563228
* SSV-3 genome sequence: Genbank accession number KY579375

**Popular Press:**

1. J. Hall, K. Stedman, and D.S. Weiss. “Sydney Kustu” Obituary. (2014). Microbe. **9/9** 381-382
2. K. Stedman “Forgotten Aliens: We should hunt for viruses in space” New Scientist “The Big Idea”. Invited contribution. 20 Dec 2013 (Holiday Special, featured on the cover). Page 42-43
   * Discussed in This Week in Virology, #266, <http://www.twiv.tv/>
   * Translated into Dutch.

**Postdoctoral Researchers Mentored:**

Ignacio de la Higuera. Fellow of Fundación Alfonso Martín Escudero. Jan 2016-

Jennifer Kyle, Ph.D. NASA-Postdoctoral Program NAI fellowship recipient (March 2010-March 2012). Nov. 2009-Sept. 2012, now at PNNL.

**Current Research Students:**

## Graduate (3):

Cheri Cloninger, M.Sc. Student, March 2015- (currently on medical leave)

David Goodman. M.Sc. Student, Sept. 2015-

George Kasun, Ph.D. Student, Jan 2014-

Honorable Mention – Robert D. Watkins Research Fellowship, August 2015

Undergraduate (10 9 Female, 0 Underrepresented Minorities):

Rita Clancey-Pfister PostBac Assistant: July 2017-

Diana Demchenko. EXITO Scholar: Jan 2017-

NASA Space Grant Research Fellowship – 2017-2018

2nd Place Biochemistry Section, ACS Poster Session, Oct. 2017

Max Larson, Undergraduate and PostBac Assistant Oct. 2015-

Anh Le, (Vietnamese) Undergraduate and PostBac Assistant, Aug 2016-

Amberlee Maluenda, EXITO Scholar: Aug 2017-

Courtney Micheletti, Undergraduate Assistant; July 2017-

Lena Nguyen, Undergraduate Assistant; July 2017-

Sara Protzek Undergraduate Assistant: Oct 2016 -

Ellis Torrance: Undergraduate Assistant: Jan 2017-

First Place Sigma Xi of the Columbia/Willamette Poster Session, 15 Nov. 17

High School (2, 2 Female)

Amelia Alonso, High School Intern, St Mary’s Academy, Feb 2018-

Lea Garzotto, High School Intern, St Mary’s Academy, Feb 2018-

## Stedman Lab Alumni: (10 graduate, 63 undergraduate, 20 high school, 3 other) 43 female 1 Native American, 4 Hispanics, 1 Pacific Islander, 2 African Americans)

## Graduate Alumni (4 Ph.D. 2 M.Sc.):

Eric A. Iverson, Ph.D. Sept 2009 – Nov. 2015

NSF East Asia and South Pacific Institutes Fellowship recipient for China, 2014

Defense: 3 November, 2015

Dissertation: A Genetic and Biochemical Analysis of *Sulfolobus* Spindle-Shaped Virus 1

Currently: Catholic Memorial School, Roxbury, MA.

James Laidler, M.D. Ph.D. Jan 2005 – June 2015

Defense: 25 June 2014

Dissertation:

Currently: StoneStable, Inc., Hooper Detoxification and Stabilization Center

Geoffrey S. Diemer, Ph.D. Sept. 2008 – Dec 2013

Defense: 10 December, 2013

Dissertation:

Postdoc: UT Medical Branch, OHSU.

Currently: Staff Scientist Vaccine and Gene Therapy Institute

Melissa DeYoung: M.Sc., Sept 2005-Sept. 2008

Defense: 19 Sept, 2008

Thesis:

## Adam J. Clore, Ph.D. Sept. 2002-Jun. 2008

Defense: 7 December, 2007

Dissertation:

Postdoc: OSHU

Currently Technical Director of Synthetic Biology, IDT

Johanna Rigas, M.Sc. Student, Fall, 2002-Winter 2004

Defense: 11 Feb. 2004

Thesis: (With B.Ullman, OHSU)

D.V.M.: Oregon State U.

Currently: Assistant Professor, Utah State University

http://caas.usu.edu/htm/faculty-staff/memberID=11393

DNF:

Yuliya Yankina, Ph.D. Student (Rotation), Sept. 2014 – July 2015. Circus Aerialist

## Carly Allen, M.Sc. Student, Sept. 2007- did not finish, DOM school.

John Rossi, Ph.D. student (did not finish) Aug. 2002 – Jan 2003, Amgen, Inc.

Mikaela Selby, M.Sc. Student, Aug. 2008- July 2012 did not finish. Tillamook Dairy.

Undergraduate Alumni (65/40/8 Total/Female/URM):

Melisa Acosta, Undergraduate assistant (**Latina**): Feb. 2010 – June 2011

## Shannon Adams-Martonick, Undergraduate Researcher, Oct. 2001-June 2002 Recipient of Undergraduate Research and Creativity Grant, Portland State University, 2002-2003 ($1344). VA Hospital, Portland

Megan Baglein Undergraduate Assistant June 2013-August 2013, RN, BSN

Holly Bradford, Undergraduate Researcher, Jan 2002 - May 2003, Providence Health Systems

Rebecca Bridges, Undergraduate Researcher – Aug 2009, OHSU, Ph.D. SUNY Stony Brook, 2017

Ric Butler, Undergraduate Researcher, Jan 2008- Jun 2008

Eric Calhoun, Undergraduate Researcher, July, 2004 - August 2004

Taryn Cansler, Undergraduate Researcher, Jan 2008- Jun 2008

Aric Capel, Undergraduate Researcher, Oct, 2008- Dec. 2010 (Fred Hutchison Cancer Research Center)

Ricky Chen, Undergraduate Researcher, Jan 2006 - August 2006, OHSU Medical School, MD.

Diana Chung, Undergraduate Researcher, April 2004-Jan 2005

Claire Couch: REU student: June 2012-August 2012, June 2013-August 2013. Goldwater scholarship recipient, University of the Pacific, B.S. Biology, NIH Postbac Training Award, Rocky Mountain Labs, Ph.D. Student Oregon State University. GRFP Recipient 2017

Random Diessner, Undergraduate Researcher, Jan 2002-June 2007, Recipient of Undergraduate Research and Creativity Grant, Portland State University, 2004-2005 ($750) and 2006-2007 ($1500) Heritage University, Freelance Artist

Brook Drew, Undergraduate Researcher, Sept. 2002- June 2004

Coyne Drummond, Undergraduate Honors Researcher, Sept. 2008 - June 2010, OHSU –Tech, Ph.D. Program at University of Pittsburgh (2012).

Nkolika Egbukichi Undergraduate Assistant (**African American F**): Jan 2012- June 2014. NASA Space Grant fellowship recipient

McNair Scholar

Emerging Researchers National Conference Abstract and Travel Grant Recipient

<http://www.pdx.edu/clas/emerging-researcher-nk-egbukichi>

Poster award winner

OHSU – research on c-myc

IRTA Postbaccalaureate Fellowship, NIH/NCI – with Adam Sowalsky

Derek Falk, Undergraduate Researcher, Jan. 2004 - Aug. 2004, Medical School of Ohio

Jeremy Filip. Undergraduate Honors Student Sept. 2012-Sept. 2014

Daniel Flannery, Undergraduate Researcher. Nov. 2004 – June 2006

Kristin Fratella, Postbaccalaureate Assistant. Oct. 2015- Feb 2016. OMSI and Molecular Genetics Laboratory

Katrina Gates, Undergraduate Assistant, August 2012 - Jan 2013

Travis Giobbi, Undergraduate Assistant. Jan 2015-July 2016, OHSU Molecular Virology Support Core

David Goodman. Undergraduate Assistant: June 2012-Sep. 2014, Technician Stedman Lab, M.S. student, Portland State University

Madeline Gorchels, REU student, June – August 2015, Wellesley College, Woods Hole Marine Laboratory.

Brittany D. K. Gratreak. Undergraduate and PostBac Assistant. Jan 2016-Jun 2016. OHSU

Jessica Grebenschikov, Undergraduate Researcher, March 2006-June 2007

Maria Harutunian, REU student, June – Aug. 2003, U. Nevada Las Vegas.

Thien Hoang, Undergraduate Assistant (PSU Honors). June 2016.

Kimia Ighani, REU student: June 2010 – Sept 2010

Kaltuma Mohamed Janay (**African American F);** Feb 2013-Sept 2014. Yale University, PREP Scholar

Setarah Mohamed Nader Undergraduate Assistant, McNair Scholar: Feb 2015-Aug 2016, **Afgani**

Mohammad Nader, Setarah (2017) "Sulfolobus Spindle-Shaped Virus 1 Growth Kinetics," *PSU McNair Scholars Online Journal*: Vol. 11: Iss. 1, Article 5.

Alejandro Jiminez, Undergraduate Researcher. June 2003-July 2008 **Hispanic**

Heather Jones, Undergraduate Assistant. Feb 2015-July 2015, MPH program U.C. Berkeley

Molly Juhlin, REU student, June 2007-September 2007, Undergraduate Researcher. August 2008- June 2009 (OSU, Pharmacy Doctor)

Hee Cheol Kim, Undergraduate Researcher, Sept 2003-Dec. 2003, San Diego, CA

Nicholas Kosmicki Undergraduate Assistant; March 2012-

Jennifer Kuo, Undergradaute Assistant: Sept. 2010 – April 2012, Medical School, U. Florida

Matt Lambert, Undergraduate Researcher. May 2005-June 2006 (Providence Cancer Center), Ph.D. Program Washington State University.

Madeline Laws, Undergraduate Assistant; Feb 2013-Jul 2015, OHSU Dermatology

Sun Jin Lee, Undergraduate Researcher. July 2006- August 2006

Samuel (Nick) Lehman, Undergraduate research intern (PCC), June 2015 – August 2015.

Caleb Marceau, Undergraduate Honors Researcher, September 2007- June 2009 **Native American (**NIH Rocky Mountain Labs, Hamilton, MT**),** Ph.D. Stanford University, 2017.

Damon McNeill, Undergraduate Assistant: Sep. 2013-Dec. 2015

Blandine Monel, International Student Intern, June 2008-Sept. 2008. Ph.D. Postdoc Ragon Institute, Boston (Sept 2012- )

Stephen Morris. Undergraduate Researcher. Jan. 2004-Sept 2005, J.D. Law Practice

Andrew Myhra. Undergraduate Researcher. Sept. 2004-Jan 2005

Setarah Mohamed Nader, Undergraduate Researcher, McNair Scholar, Feb 2015- Nov 2016

Jennifer Newsted, Student intern, June 2013-August 2013. U.Nevada, Las Vegas, Solar World

Swati Pandruvada, REU student, June 2017-August 2017, Case Western Reserve University

Nicole Paterson. Undergraduate Assistant: June 2011-Sept. 2012, Research assistant at OHSU

* Oral and Poster Presentation at Oregon NASA Space Grant Consortium Student Symposium, 8 Feb 2013, OSU.

Maria Quezada (Herrera), Undergraduate Researcher, August 2006 – June 2007 - **Latina**

McNair scholar, Currently at OSHU

Baylee Russell, REU Student, California State University, Chico. Jun-Aug 2016.

Lorie Fisher-Seitz, Undergraduate Volunteer, Jan 2002-Dec2002

Adam Sandes, Undergraduate Researcher. Sept. 2005- June 2009 (OHSU)

* Maria Herrera and Adam Sandes were chosen for oral presentations of their poster: Characterization of a Novel Hypermotile Thermoacidophilic Archaeon. They also received a prize for best poster at the Northwest Regional American Society for Microbiology annual meeting in Seattle, Washington. March 9-11, 2007

Elisabeth Scott. Undergraduate Researcher, Jun 2002-May 2003, U. Arizona, Tuscon.

Michelle Thayer, Undergraduate Researcher. Sept. 2003- June 2006, Recipient of Undergraduate Research and Creativity Grant, Portland State University, 2006-2007 ($1500), M.S. UCLA, High School Biology Teacher, Los Angeles Center for Enriched Studies.

Brownie Tuiasosopo, Undergraduate assistant, LSAMP, (**Pacific Islander**): March 2010 – Sept. 2014, Medical school at the Medical University of Oceania

Angela Van Ecken, Undergraduate Assistant, EXITO Scholar: June 2016 – June 2017.

Ashley Vassilaros, Undergraduate Researcher. May 2005-Sept 2005, and Spring 2007.

Karen Wallace, Undergraduate Researcher, Jan 2003-Dec. 2003. M.Sc. PSU

Daniel Wark, Undergraduate Researcher. Sept. 2006-June 2007

Laura White, Undergraduate Honors Researcher, March 2008- June 2009, OHSU, Ph.D. Program at OHSU, 2012 (now Laura Springgay)

Carrie Brandon (Widman), Undergraduate Researcher, June 2004-October 2004, Pharmacist

Kameron Witham - Undergraduate Assistant: Feb 2012-April 2013

Joel Womack, Undergraduate Researcher. Jan. 2007-Jun2008

Caroline Zaoui, Undergraduate Researcher, Jan 2003-June 2003. PhD., Braunschweig, Germany

Luisa Zoeller, Undergraduate Researcher, Jan 2002-March2003 - **Latina**

High school Alumni (21/17): ASE (14/11),

Megan Baglein, High School Student Volunteer, June 2010 – Dec. 2010 – OSU, UP Nursing.

Kendal Chatard, ASE student, 28 June 2017-Aug 2017

Celeste Chow, ASE student: June 2012-August 2012

Allison Croak, ASE Student: June 2016-August 2016, Cornell University.

Aaron Daugherty, High School Student Apprentice (ASE), June 2004 - Sept. 2004. Full Ride scholarship to University of Richmond, Ph.D. Stanford University, Genetics. Now at Twoxar

Kayla Gadd, High School Student Apprentice (ASE). June- Aug 2015, First Place Cellular and Molecular Biology ISEF State Science Fair, Oregon, April 2016, Northwestern U.

Shirley Galbiati, High School Student Apprentice (ASE)), June- Aug 2008, MIT

Maria Hamilton (**Latina**) ASE High school Student Apprentice, June 2010 – Sept. 2010

Jamie Hamilton, High School Student Research Intern, St. Mary’s School. Feb 2016- May 2016

Valerie Huang. ASE High school Student Apprentice; June 2013-August 2013, USC

Jared Kerman, High School Student Apprentice (ASE). June- Aug 2015, Honorable Mention, ISEF State Science Fair, Oregon, April 2016. University of Chicago

Linda Lin, Sept. 2004, Harvard

Liliya Nankova, May 2006-June 2006, Reed College

Katrina Peterson, ASE High school Student Apprentice. June 2005-Aug 2005, Yale University

Hope Pinelli, St. Mary’s High School, Feb 2013-May 2013, University of San Francisco

Andrew Platt, High School Student Volunteer, June 2002, Brown University

Anusha Sanka. ASE Student. Jun –Aug 2014, Case Western Reserve University

Annika Sullivan, ASE High school Student Apprentice, June 2007-Aug 2007, Oberlin

Emma Weeks. High school volunteer, St. Mary’s high school. Feb 2017-May 2017, Oregon State University

Ran Yang, ASE High school Student Apprentice, June- Aug 2008

Yujie Zeng, ASE High school Student Apprentice, June 2006-August 2006, Columbia University

Other:

Laurie Casalot, Visiting Scientist, IRD-Marseille. Sept. 2007-Dec 2007

Yannick Combet-Blanc, Visiting Scientist, IRD-Marseille. Oct. 2001-June 2002

Jordan Hartunians, Visiting Scholar, Université de Bretagne Occidentale. Jan.-June 2015, Masters program in Systems and Synthetic Biology, Université d’Evry. Ph.D. Program Université de Bretagne Occidentale, Brest, France.

Laasya Yenduri, Middle School Science Fair Project, Feb 2017

**Honors Thesis Student advisor:**

Brit Gratreak, Biology Department

Jeremy Filip, Biology Department.

Nkolika Egbukichi, Biology Department

Ioana Brisc, Biology Department, Graduated with honors, Spring 2004

Caleb Marceau, Biology Department, Graduated with honors, Spring 2009

Laura K. White, Biology Department, Graduated with honors, Summer, 2009

Coyne Drummond, Biology Department. Graduated with honors. Spring 2010

Honors Student Committee Member

Jess Millar, Biology Department (Committee)

Fernando Camacho, Biology Department, Graduated with honors, Spring 2007 (committee)

Michael Pham, Biology Department, Graduated with honors, Spring 2009 (committee)

Susan Holmes, Biology Department.

**Thesis Committees:**

**M.Sc.Chair (3)**

**Eileen Fitzpatrick: M.Sc. Biology, Thesis Defense, Nov. 2012**

**Melissa DeYoung: M.Sc. Biology, Thesis Defense 19 Sept, 2008**

**Johanna Rigas, M.Sc. Biology, Thesis Defense 11 Feb. 2004**

**M.Sc. (17)**

Jess Millar, Raghavan Lab, Thesis Defense, 30 May 2017

Arati Bhattarai, Bartlett Lab

Dana Clink, Jones Lab

Arthur Jeiranian, Biology, Courcelle Lab, transferred to Ph.D. program

Katherine Ona, Biology, Courcelle Lab

Thomas Jones, M.S. Physics, Konenkamp Lab (Grad Rep)

Ann Raffel, Biology, Jones Lab, 6 August 2013

Alexander Rutherford, Biology Reysenbach Lab, 16 Aug 2013

Ksenia Everton, Biology, Garlid Lab, 13 May, 2008

Julia Kottmeier, M.S. Biology, Bartlett Lab, May 9th, 2008

Sarah Lyon, M.S. Biology, Podrabsky Lab, May 24th, 2006

Charlene Morishita, M.S. Biology, Mary Taylor, Feb. 11th, 2005

Tara Lyn Hebert, M.S. Health Studies, May 4th, 2005 (Grad. Rep)

Chin-Fang Tang (Ah-Fang), M.S. Biology, Boone Lab, June 7th, 2004

Neha Singh, M.S. Biology, Boone Lab, 2 July, 2003

Martin Soberaj, M.S. Biology, Biology, Boone Lab, 8 May, 2003

Melissa Kendall, M.S. Biology, Biology, Reysenbach Lab, 19 March, 2002

**Ph.D. Chair and Advisor (5)**

George Kasun, Ph.D. Biology Stedman Lab

Prospectus:

Defense:

Eric Iverson, Ph.D. Biology, Stedman lab

Prospectus: Dec 2013

Defense: 3 Nov. 2015

Geoff Diemer, Ph.D. Biology, Stedman lab

Prospectus: 30 May 2013

Defense: 10 Dec. 2013

James Laidler, Ph.D. Biology, Stedman lab

Prospectus: 11 June 2010

Defense: 25 June 2014

Adam Clore, Ph.D. Biology, Stedman Lab

Prospectus 29 Nov, 2005

Defense: 7 Dec, 2007

**Ph.D. Committee Member (30; 4 as external international examiner)**

Brittney Davidge, Ph.D. Student, Biology, Singer Lab

Defense: 5 June 2017

Brie Tripp, Ph.D. Student, Biology, Shortlidge Lab

Ben Turner, Ph.D. Student, Chemistry, Iwata-Reuyl Lab (Grad Rep)

Defense: 1 May 2017

Tatiana Demina, Ph.D. Student University of Helsinki, Finland.

External Pre-Examiner of Ph.D. Thesis 17 October, 2016

Kristine Buch Uldahl, Ph.D. Student, University of Copenhagen

Defense: 18 Jan 2016 (in Copenhagen, Denmark)

Ben Rausch, Ph.D. Student, BMB (OHSU), Perona Lab

Defense: 18 June 2015

Alice Palwowski, Ph.D.Student, University of Jyväskylä, (Opponent)

Defense: 17 April 2015 (In Jyväskylä, Finalnd)

Shaimaa Salem, Ph.D. Student, Chemistry, Reynolds Lab (Grad Rep)

Defense: 1 Nov, 2012

Renu Singh, Ph.D. Student, Chemistry, Reynolds Lab (Grad Rep)

Prospectus: 14 May, 2012

Defense: 31 Oct. 2014

Katherine Liebman, Ph.D. Student, Chemistry, Peyton Lab (Grad Rep)

Prospectus: 31 May, 2012

Defense: 29 Aug 2014

Meli Ming Tiao: Ph.D. Student, Biology, Bartlett Lab:

Recommended transfer to MS 15 Dec 2010

Prospectus 5 Feb, 2008

Aurore Gorlas, Ph.D. Student Université de Brest Occidentale, (Rapporteur)

Defense 10 Dec. 2010 (in Brest, France)

John Yan, Ph.D. Student, Chemistry, Reynolds Lab (Grad Rep)

Prospectus: 18 March, 2009

Defense: 31 Aug, 2010

Michael Micorescu, Ph.D. Biology, Bartlett Lab

Prospectus: 14 Apr. 2008

Defense 11 Feb. 2010

Aaron Burton, Ph.D. Chemistry, Lehman Lab

Prospectus: 2 Oct. 2007

Defense: 4 May 2010

Phil Jones, Ph.D. Student E.S.R./Biology, Ruedas Lab

Prospectus: 20 June, 2006

Defense; 13 Feb. 2009

Steven Burgess, Ph.D. ESR/Chemistry, Peyton Lab (Grad Rep)

Prospectus: 4 Dec. 2007

Defense: Spring 2007

Laurie Dizney, PhD. Student, Biology, Ruedas Lab

Prospectus: 17 July, 2006

Defense: 13 June, 2008

Antoine Page, Ph.D. Student Biology, Reysenbach Lab.

Prospectus April 13th, 2006

Defense May 9th, 2008

Shilah Bonnet, PhD., E.S.R./Chemistry, Iwata-Reuyl Lab, (Grad. Rep.)

Prospectus: 8 May, 2006

Defense: 19 July, 2007

Jessica Goin, Ph.D., ESR/Geology, Cady Lab, (Grad Rep)

Prospectus: 22 Jan., 2007

Defense: 28 Jun. 2007

Niki Parenteau, Ph.D., ESR/Geology, Cady Lab, (Grad Rep)

Prospectus: 25 Jan. 2007

Defense: 9 May, 2007

Bobby Lee, PhD., E.S.R./Chemistry, Iwata-Reuyl Lab,

Prospectus: 23 May, 2006

Defense: 7 May, 2007

Melissa Kendall, Ph.D. Student E.S.R./Biology, Boone Lab,

Defense: 18 Nov, 2005

Theresa Hayter, PhD. Student Mathematics,

Prospectus 15 Nov. 2005. – On Leave

Paula Aguiar, Ph.D. Student, E.S.R./Biology, Reysenbach/Boone Lab,

Defense: 8 July, 2005

Adam Bonin, Ph.D. Student, E.S.R./Biology, Boone Lab,

Defense: 3 Dec. 2004

Sara Kelly PhD. Student, E.S.R./Biology

Prospectus 20 Nov. 2003. – Left Program

John Cramer, PhD., E.S.R./Chemistry, Peyton Lab,

Defense: 14 August, 2003.

Song-Chun Chong, Ph.D., E.S.R./Biology, Boone Lab,

Defense: 25 October, 2001

Consultant/Advisor for Biomath Student: Faisal Kahn

**Comprehensive Examination Committees (22):**

2017:

Katia de Oliveira Rebola, Ph.D. Student Biology, Orals 7 Dec 2017

George Kasun (Chair), Ph.D. Student, Biology, Orals, 1 March 2017

2015:

Robyn Eustis, Ph.D. Student, Biology, Orals 15 July 2015

2014:

Memet Balkan, Ph.D. Student Biology, Orals 5 June 2014

2013:

Eric Iverson, Ph.D. Student Biology, Orals : 22 March 2013 (Chair)

2012:

Arati Bhattarai, Ph.D. Student Biology, Orals: 30 April 2012

Brittney Davidge, Ph.D. Student Biology. Orals:

2010:

Meli Wu, Ph.D. Student Biology, Orals: 15 Dec 2010

Geoff Diemer, Ph.D. Student, Biology Orals: 7 Dec 2010 (Chair)

2006:

Sarah Courbis, Ph.D. Student, Biology, Fall 2006

Laurie Disney, Ph.D. Student, E.S.R./Biology, Feb 24th , 2006

Carolina Diaz, Ph.D. Student, E.S.R./Biology, May 17th, 2006

2005:

Michael Micorescu, Ph.D. Student E.S.R./Biology, April 20th, 2005

Casey Quinlan, Ph.D. Student, E.S.R./Biology, Dec. 12th, 2005

2004:

Adam Clore, Ph.D. Student E.S.R./Biology Jan. 5-6, 2004 (Chair)

Adam Bonin, Ph.D. Student E.S.R./Biology, March 1st, 2004

Antoine Page, Ph.D. Student E.S.R./Biology, May 19th, 2004

Phil Jones, Ph.D. Student E.S.R./Biology, May 20th, 2004

Melissa Kendall, Ph.D. Student E.S.R./Biology, May 14th, 2004

Theresa Hayter, Ph.D. Student, Mathematics, Nov. 12th, 2004

2003:

Brad Ryan, Ph.D. Student E.S.R./Biology August 28th, 2003

2002:

Paula Agilar, Ph.D. Student E.S.R./Biology March 28th, 2002

**Teaching at Portland State University:**

* Biology 424/524; Molecular Genetics
  + Spring 2015: 19 students
  + Spring 2014: 12 students
  + Spring 2013: 23 students
  + Winter 2010: 21 students
  + Winter 2008: 12 students
  + Winter 2007, 19 students
  + Fall 2005, 25 students
  + Spring 2005, 18 students
  + Spring 2004, 24 students (New Course)
* Biology 338/334: Introduction to Molecular Biology/Molecular Biology,
  + Winter 2017: 129 Students
  + Winter 2016: 138 Students
  + Winter 2015: 139 Students
  + Winter 2014 : 150 students
  + Fall 2012: 206 students
  + Fall 2011: 154 students
  + Fall 2009: 88 students
  + Fall 2008: 121 students
  + Fall 2007: 115 students
  + Fall 2006: 82 students
  + Winter 2006: 106 students
  + Winter 2005: 121 students
  + Winter 2004, 66 students.
  + Spring 2003, 40 students.
  + Winter 2003, 100 students.
  + Winter 2002, 96 students.
    - “Best teacher I have had in 28 years” B. Edmunds
* Biology 421/521: Virology
  + Spring 2017: 66 students
  + Spring 2016: 64 students
  + Spring 2015: 80 students
  + Spring 2014: 60 students
  + Spring 2013: 100 students
  + Winter 2012: 85 students
  + Winter 2010 : 71 students
  + Winter 2009 : 69 students
  + Winter 2008: 54 students
  + Winter 2007: 65 students
  + Fall 2005: 53 students
  + Winter 2005: 44 students
  + Fall 2003, 45 students (40 undergraduates, 5 graduate students)
  + Fall 2002, 42 students (37 undergraduates, 5 graduate students),
* Biology 507 Section 2: Advanced Biological Topics,
  + Winter 2002, 10 students
  + Spring 2002, 14 students
* Biology 430/530 Recombinant DNA Techniques
  + Spring 2012, 41 students
* Biology 431/531: Recombinant DNA techniques Lab,
  + Spring 2017: 20 students
  + Spring 2016: 29 students
  + Spring 2015: 16 students
  + Spring 2014: 20 students
  + Spring 2013: 45 students
  + Spring 2012: 30 students
  + Spring 2002, 16 students.

Cited by non-major students in John Eliot Allen Awards nomination process as “the outstanding teacher at Portland State University that they had been associated with outside of their major” (3 years)

**59 Oral Presentations at International Meetings (Presenter underlined when multiple authors):**

2017:

* Kenneth Stedman. “Viruses from Hell: Extreme Mutation Tolerance: The Fusellovirus SSV1. International Symposium on Extreme Ecosystems and Extremophile Organisms. Sept. 18-20, 2017. The State University of Morelos, UNAM, Cuernavaca, Morelos, Mexico (Invited).

2016:

* Kenneth Stedman. “Structure and genetic analysis of *Sulfolobus* fuselloviruses” FASEB meeting on Virus Structure and Assembly, July 24-29, 2016, Steamboat Springs, CO, USA (Invited).
* Kenneth Stedman. "Chimeric viruses and insights into transitions between RNA and DNA" in Symposium Spotlighting viruses in evolution: 4 billion years of coevolution with cells Earth Life Science Institute at Tokyo Institute of Technology, Sept. 9 2016, Tokyo Japan (Invited).
* Kenneth Stedman "Genetic Analysis of the Japanese Fusellovirus SSV1"  Extremophiles 2016: on Sept. 13, 2016. Kyoto, Japan

2015:

* K.M. Stedman Invited Speaker, “The Unique Structure, Replication and Genetics of Sulfolobus Fuselloviruses.” Thermophiles 2015, 30 Aug- 4 September, 2015, Santiago, Chile.
* A. Reysenbach, M. Podar, M. Scott, S. L’Haridon, Y. Liu, J. Kelley, R. Davis, K. Stedman, R. Raghavan, and M. Jebbar. “Novel Thermophilic Nanoarchaeota”. Thermophiles 2015, 30 Aug- 4 September, 2015, Santiago, Chile.
* K.M. Stedman. “Viruses from Hell: Unique Viruses from Extreme Environments” Invited Plenary Speaker, American Society for Virology, Annual Meeting. 11-15 July, London Ontario, Canada.
* K. M. Stedman, E. A. Iverson, D. Goodman, J. Hartunians, V. Huang. “Elucidating the Evolution of Extremophile Viruses by Comparative Genomics and Genetics.” AbSciCon 2015, 15-19 June 2015, Chicago, IL, USA.
* K.M. Stedman. “Lemons, Lysis and Lysogeny : The Fuselloviruses” The Year of the Phage, 9-10 Jan, 2015. San Diego, CA. (Invited)

2014:

* E. Iverson, D. Goodman, T. Hoang, M. Saha, M.C. Morais, and K.M. Stedman “The novel Spindle-shaped Structure and Infection Kinetics of the Archaeal Virus SSV1. West Coast Bacterial Physiologists Annual Asilomar Meeting. 12-14 Dec 2014, Pacific Grove, CA. USA.
* K.M. Stedman,D.Goodman, E.Iverson, M.C.Morais. "Lemons, Lysis and Lysogeny : Structure and Genetics of the Prototypical Fusellovirus SSV1" Molecular Biology of Archaea 4. 19-22 May 2014, Paris France. (Invited)

2013:

* E. Iverson, D. Goodman, V. Huang, and K.M. Stedman “Genetic Analysis of the Archaeal Virus SSV1.” West Coast Bacterial Physiologists Annual Asilomar Meeting. 13-15 Dec 2013, Pacific Grove, CA. USA.
* K. Stedman “Novel RNA-DNA hybrid viruses from an acidic hot lake and elsewhere”. 12th International Thermophiles Meeting 8-13 September, Regensburg, Germany.
* K. Stedman. “Viruses from high temperature acidic environments” XII Congresso Nacional de Virología (Spanish National Virology Congress), 9-12 June 2013, Burgos, Spain. (Invited Keynote Speaker).

2012:

* G.S. Diemer and K. Stedman, “A novel virus discovered in an extreme environment may provide a window into an ancient epoch of genomic evolution“ AbSciCon12. April 16 – 20, 2012, Atlanta, GA. USA.
* J.E. Kyle, L.L. Jahnke and K.M. Stedman “Changes in virus infectivity and virus and host lipids under silicifying conditions: Implications for virus biosignatures“ AbSciCon12. April 16 – 20, 2012, Atlanta, GA. USA.
* K.M. Stedman, J.R. Laidler, and S. L. Cady “Differential Deactivation, Reactivation and Dessication Tolerance of Silicified Viruses*”* AbSciCon12. April 16 – 20, 2012, Atlanta, GA. USA.

2011:

* E.Iverson and K.M. Stedman. Genetic and Biochemical Investigations of SSV1\_VP2, a DNA Binding Protein from a Hyperthermophilic Archaeal Virus. West Coast Bacterial Physiologists Annual Asilomar Meeting. Dec. 9-11, 2011, Pacific Grove, CA, USA.
* K. M. Stedman, A. Capel, G. Diemer, B. Tuiasosopo, P. Siering, M. Wilson and G. Wolfe. Unique viruses from an Extreme Environment: The Boiling Springs Lake Metavirome. American Society for Microbiology, Northwest Branch Meeting. 18-19 Nov. 2011, Seattle, WA. USA.
* K. M. Stedman, A. Capel, G. Diemer, B. Tuiasosopo, P. Siering, M. Wilson and G. Wolfe. “The Boiling Springs Lake Metavirome.” Thermophiles 2011, 11-16 Sept. 2011. Big Sky, MT. USA

2009:

* K. Stedman. “Biogeography and Host Range of Fuselloviruses.” Gordon Research Conference on Archaea. July 26-31, 2009 (Vice-chair). Waterville Valley, NH. USA.

2008:

* A.J. Clore. and K. Stedman “Whole genome sequencing of extreme Fuselloviruses and their biogeography” AbSciCon08. April 15-17, 2008, Santa Clara, CA. USA.
* J. Laidler and K. Stedman “Silicification of Viruses in a Simulated Hydrothermal Environment “AbSciCon08. April 15-17, 2008, Santa Clara, CA. USA.

2007:

* A.J. Clore and K. Stedman “Integration characteristics of the *Fuselloviridae*; unique viruses of hyperthermophilic Archaea” American Society for Virology, 14-18 July, 2007, Corvallis, OR, USA.
* M. Herrera, A. Sandes, R. [Diessner](mailto:random@pdx.edu), and K. Stedman. Genetic Characterization of a Novel Hypermotile Thermoacidophilic Archaeon. ASM-Northwest Branch Meeting. March 9-11, 2007, Seattle Washington, USA.
* M. Herrera, A. Sandes, R. [Diessner](mailto:random@pdx.edu), and K. Stedman. Physiological Characterization of a Novel Hypermotile Thermoacidophilic Archaeon. ASM-Northwest Branch Meeting. March 9-11, 2007, Seattle Washington, USA.

2006:

* K.M. Stedman, A. Clore, Y. Combet-Blanc, A. Daugherty, R. Diessner, M. Lambert, and S. Morris. Diversity, Genomes, and Stability of Viruses of the Hyperthermophilic Archaeon *Sulfolobus.* International Conference on Extremophiles, 17-21 Sept. 2006. Brest, Brittany, France.
* K. Stedman. Biogeographical Diversity of Archaeal Viruses. 158th Annual Meeting of The Society for General Microbiology. April 3-6, 2006 University of Warwick, Coventry, England (Plenary session, Invited speaker)

2005:

* Clore and K. Stedman, "Integration and replication in the hyperthermophilic virus family *Fuselloviridae*”, West Coast Bacterial Physiologists Asilomar Conference. Dec. 16-18, 2005, Asilomar, CA, USA.
* K. Stedman. Viruses from Hell. The Northwest Mining Association 111th Annual Meeting. December 5-9, 2005 Spokane Washington (Invited)
* K. Stedman: Diversity of Viruses of (Cren)archaeal Thermophiles. The 9th International Congress of Bacteriology and Applied Microbiology, Joint meeting of the International Union of Microbiological Societies 2005. July 23-28, 2005 San Fransciso, California, USA. (Invited, Session chair and organizer)
* Y.Combet-Blanc, S. Morris and K. M. Stedman. Genomes and Stability of the Fuselloviridae. Archaea, The First Generation, June 2-4, 2005 Schloss Hohenkammer, Bavaria, Germany (Invited)
* K. Stedman, Viruses from Extreme Environments. Goldschmidt 2005 May 20-25, 2005. Moscow Idaho, USA (Invited)

2004:

* K. Stedman, Y. Combet-Blanc, R. Diessner, J. Snyder, B. Wiedenheft, and, M. J. Young. Comparative Genomics and Diversity of Viruses of Extreme Archaeal Thermophiles. American Society for Microbiology Conference on the New Phage Biology August 1 - 5, 2004 Key Biscayne, Florida, USA.
* K. Stedman, Y. Combet-Blanc, B. Wiedenheft, A. Clore, G. Rice, J. Snyder, J. Spuhler, L. Zoeller, F. Roberto, M. J. Young, and W. Zillig. Genetics and Genomics of Fuselloviruses of hyperthermophilic Archaea. Third Astrobiology Science Conference. March 28th – April 1st, 2004. NASA-Ames, California, USA.
* M. J. Young, K. Stedman, B. Wiedenheft, J. Snyder, G. Rice, J. Spuhler, F. Roberto, L. Tang, T. Douglas, and J. E. Johnson. Viruses from Yellowstone’s high temperature acidic environments. Third Astrobiology Science Conference. March 28th – April 1st, 2004. NASA-Ames, California, USA.

2003:

* S. Brouns, J. Walther, R. Bernander, K. Stedman, M. Young, B. Snijders, P. Wright, J. van der Oost**.** The hyperthermophilic archaeon *Sulfolobus* - from exploration to exploitation. First Biannual Workshop on Geothermal Biology and Geochemistry in Yellowstone National Park, October 9-11, 2003. Yellowstone National Park, Wyoming, USA.
* K. Stedman, and E. Barklis. Extremophiles and their Viruses in Nanotechnology. Nanoscale Science and Technology Workshop, 2003. Sept. 22-23, 2003. Seattle, Washington, U.S.A.
* A.J. Clore, and K. Stedman. Exploring the Replicative Cycle of SSV1, a Virus of the Archaeon *Sulfolobus shibatae*. 15th Evergreen International Phage Meeting, Evergreen State College, July 23-27, 2003, Olympia, Washington, U.S.A.
* Wiedenheft, K. Stedman, F. Roberto, D. Willits, A. Gleske, and M. Young. Comparative Genomic Analysis of the Hyperthermophilic Archaeal SSV Virus. American Society for Virology, Annual Meeting, June 12-17, 2003. Davis, California, U.S.A.
* G. Rice, L. Tang, J. Spuhler, K. Stedman, J. E. Johnson, and M. Young. Structure and Characterization of a New High Temperature Virus. American Society for Virology, Annual Meeting, June 12-17, 2003. Davis, California, U.S.A.

2002:

* K. Stedman, G. Rice, J. Snyder, B. Wiedenheft, M. Young, and W. Zillig, Novel Viruses from Extreme Environments .(Invited talk) Second Astrobiology Science Conference, April 7-11, 2002. NASA Ames Research Center, U.S.A.

2001:

* Ken Stedman, B. Wiedenheft, R. A. Garrett, F. Roberto, M. Young, and W. Zillig, Comparative genomics of *Sulfolobus* viruses. West Coast Bacterial Physiologists Annual Asilomar Meeting, Dec. 14-16 2001, Asilomar, California, USA.
* K. Stedman. *Sulfolobus* viral biodiversity. Gordon Conference on Archaea: Ecology, Metabolism and Molecular Biology . August 5-10, 2001, Proctor Academy, Andover, New Hampshire, U.S.A.

2000:

* H.P. Arnold, E. Bonch-Osmolovskaya, R. Garrett, H. Phan, J.K. Kristjansson, E. Redfield, G. Rice, F. Robb, Q. She, J. Snyder, K. M. Stedman, B. Wiedenheft, M. Young, and W. Zillig. Biodiversity in Fuselloviruses from Japan, Iceland, Yellowstone USA, and Kamchatka, Russia.West Coast Bacterial Physiologists Annual Asilomar Meeting, Dec. 15-18 2000, Asilomar, California, USA.
* K. Stedman, E. Martusewitsch, C. Schleper, J. van der Oost, and W. Zillig. Advances in Molecular Genetics of *Sulfolobus* *solfataricus*. Extremophiles. Sept. 3-7, 2000. Hamburg Germany.
* K. Stedman, E. Martusewitsch, W. Zillig, and C. Schleper. Transformation of *Sulfolobus* *solfataricus* with viral vectors. Kamchatka 2000: Enzymology, Molecular Biology and Biogeochemistry of Thermophiles . August 6-12, 2000, Petropavlovsk-Kamchatsky, Russia
* K. Stedman, R.A. Garrett, and W. Zillig. Was *S. solfataricus* infected with an SSV? Did SSV steal some genes from the *S. solfataricus* genome? Workshop on the Origin and Evolution of viruses. July 25-27, 2000 Fondation des Treilles , France
* K. Stedman. H.P. Arnold, D. Prangishvili, E. Redfield, G. Rice, J. Snyder, H. Phan, Q. She, R. A. Garrett, M. Young and W. Zillig. SSV from Yellowstone, Iceland and Japan: SSVs are everywhere. Workshop on the Origin and Evolution of viruses. July 25-27, 2000 Fondation des Treilles , France

1990s

* K. Stedman, H.P. Arnold, I.Holz, D. Prangishvili, and W. Zillig. Novel Archaeal Viruses: Collection, Characterization and Utilization. West Coast Bacterial Physiologists Annual Asilomar Meeting, Dec. 17-19 1999, Asilomar, California, USA.
* K. Stedman, E. Martusewitsch, C. Schleper, E. Stieger, and W. Zillig. Genetic Engineering in the Extremely Thermophilic Archaeon *Sulfolobus solfataricus*. Third Meeting on Extremophiles as Cell Factories. June 3-6, 1999, Graz, Austria.
* K. Stedman, Q. She, I. Holz, D. Prangishvili, H. Singh, R. A. Garrett, and W. Zillig. Conjugation in Archaea: New Twists on an Old Theme. Vereinigung für Allgemeine und Angewante Mikrobiologie, annual meeting, March 7-10, 1999, Göttingen, Germany.
* K. Stedman, Q. She, I. Holz, D. Prangishvili, H. Singh, R. A. Garrett, and W. Zillig. Conjugation in Archaea: New Twists on an Old Theme. West Coast Bacterial Physiologists Annual Asilomar Meeting, December 18-20, 1998, Asilomar, California, U.S.A.
* K. Stedman, C. Schleper, I. Holz, W. Zillig, H. Phan, Q. She, and R.A. Garrett. A viral transforming vector for *Sulfolobus solfataricus* and insights from conjugative plasmid sequences. Second Workshop on vector development for Extremophiles, November 8-10, 1998, Gif sur Yvette, France.
* K. Stedman, C. Schleper, and W. Zillig. Recombinant Fuselloviruses as High Copy Number Vectors for the Extremely Thermophilic Archaeon *Sulfolobus* *solfataricus*. Thermophiles 98, September 6-11, 1998, Brest, France.
* Arnold, H.P., Holz, I., Prangishvili, D.,Rumpf, E., Schleper, C., Schweier, P.A., Stedman, K., and W. Zillig. Molecular Genetic Tools for the Extremely Thermophilic Archaeon Sulfolobus. Second Meeting on Extremophiles as Cell Factories. April 17-21, 1998. Dublin Ireland. (Plenary Oral Presentation).
* K. Stedman, C. Schleper, and W. Zillig. A shuttle vector for the extremely thermophilic archaeon *Sulfolobus solfataricus* and *E.coli*.. Vereinigung für Allgemeine und Angewandte Mikrobiologie. March 22-25, 1998 Frankfurt, Germany.
* Stedman, K., Schleper, C., Arnold, H.-P., Holz, I., Rumpf, E., and Zillig, W.

Vector Development for Extremely Thermophilic Archaea: West Coast Bacterial Physiologists Annual Asilomar Meeting December 19-21, 1997, Asilomar, California, U.S.A.

* Stedman, K., Arnold, H.-P., Holz, I., Rumpf, E., and Zillig, W. Developments using SSV1 as a vector system. Workshop on vector development for Extremophiles, October 3-5, 1997. Naples, Italy.

**50 Poster Presentations at National and International Meetings (Presenter underlined):**

2017:

* D. A. Goodman and K. M. Stedman. Comparative Genetic and Genomic Analysis of The Novel Fusellovirus: Sulfolobus Spindle-shaped Virus 10. Thermophiles 2017, 27 Aug – 1 Sept. 2017, Shukuza Conference Center, Kruger National Park, South Africa.
* J.F. Reed, D. Demchenko, K.M. Stedman and M.R. Mackiewicz. Exploring the Effects of Differentially Shielded Silver Nanoparticles on a Robust Thermophilic Virus. ACS NORM (Northwest Regional Meeting). June 25-28, 2017 Corvallis, Oregon, USA.
* T. Mochizuki, A. Berliner, K.M. Stedman. Viruses at Large in the Universe. AbSciCon 2017, 24-28 April, 2017, Mesa, Arizona, USA.

2016:

* D. A. Goodman and K. M. Stedman. Characterization and Comparative Genomics of a novel archaeal virus: Sulfolobus spindle-shaped virus Lassen (SSV-L/SSV-10). Northwest Branch American Society for Microbiology annual meeting, 18-19 November, 2016, Seattle, Washington, USA.

2014:

* N. Egbukichi, G. S. Diemer, E. Iverson, and K.M. Stedman. Characterization of the RNA-DNA Hybrid Virus Capsid Protein, Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM) Feb 20 - 22, 2014  , [Washington DC, USA.](http://www.washington.edu/maps/)
  + Won poster prize

2013:

* N. Egbukichi, and K.M. Stedman. Characterization of the RNA-DNA Hybrid Virus Capsid Protein, The 21st  Annual McNair/EIP/GO-MAP Research Conference  , May 16 - 18, 2013  , [UW Seattle, USA.](http://www.washington.edu/maps/)
* K. M. Stedman, J. Filip, G. S. Diemer. A novel mechanism for RNA-DNA recombination in virus evolution. American Society for Microbiology General Meeting. May 18-21, 2013 Denver, CO, USA.

2012:

* A.O. Nichols, C. Drummond, K. Stedman, and M. Ceballos. “Host-dependent differences in replication strategy of the *Sulfolobus* Spindle-shaped Virus strain SSVK1: Lytic replication in allopatric hosts”. AbSciCon12. April 16 – 20, 2012, Atlanta, GA. USA.
* J.E. Kyle, K. Stedman, and L. Jahnke “Lipid profile of a saline, alkaline lake (with a viral twist?)” AbSciCon12. April 16 – 20, 2012, Atlanta, GA. USA.
* K.M. Stedman, P.L. Siering, M.S.Wilson, G.S.Wolfe, B. Tuiasosopo, and G.S. Diemer. “Macrohomogenitiy and Microheterogeneity in an Acidic Hot Lake” AbSciCon12. April 16 – 20, 2012, Atlanta, GA. USA.
* Jennifer Kyle, Linda Jahnke, and Kenneth M. Stedman. Preservation Potential of Lipid-containing Viruses under Silicifying Conditions. 43rd Lunar and Planetary Science Conference, (19-23 March, 2012, Woodlands Texas.)

2011:

* Kenneth M. Stedman, Aric Capel, Geoff Diemer, Jennifer Kyle, Brownie Tuiasosopo, Patricia Siering, Mark Wilson, and Gordon Wolfe. The Boiling Springs Lake Metavirome. Aquatic Virus Workshop 6, 30 Oct. – 3 Nov. 2011, Texel, The Netherlands.
* Geoffrey S. Diemer, Maria Hamilton, Jennifer Kuo, and Kenneth M. Stedman. Unique Microviruses in an Acidic Hot Lake, Thermophiles, 2011. Sept. 11-16, 2011. Big Sky, MT, USA.
* Eric Iverson and Kenneth M. Stedman. SSV1mutagenesis and characterization of the putative packaging protein VP2. Thermophiles, 2011. Sept. 11-16, 2011. Big Sky, MT, USA.
* Mikaela Selby, Marc Morais, and Kenneth M. Stedman. Structure and Assembly of the Archaeal Virus SSV-1. Thermophiles, 2011. Sept. 11-16, 2011. Big Sky, MT, USA.

2010:

* Gordon V. Wolfe, Russell Shapiro, Patricia Siering, Mark Wilson, Ken Stedman, Jennifer Kyle, and Faryar Etesami. Revealing the Hidden Environments of an Acidic Geothermal Lake Using Sonar Bathymetry, High-Resolution GPS Mapping, and Time-Lapse Photography. ISME 2010. Aug 22-27, 2010. Seattle, WA, USA.
* Jennifer E. Kyle, Geoff Diemer, and Kenneth M. Stedman. A Replacement for Anodisc 0.02μm Filter Membranes, ISME 2010. Aug 22-27, 2010. Seattle, WA, USA.
* Coyne Drummond and Kenneth M. Stedman. Characterization of Sulfolobus Spindle-shaped Virus 1 Replication, ISME 2010. Aug 22-27, 2010. Seattle, WA, USA.
* Geoffrey S. Diemer and Kenneth M. Stedman. Metaviromics of an Extreme Environment, ISME 2010. Aug 22-27, 2010. Seattle, WA, USA.
* Geoffrey Diemer and Kenneth Stedman. A Metavirome of an Extreme Microbial Environment. Viruses of Microbes, June 21-25, 2010. Paris, France.
* Geoffrey S. Diemer, Jennifer Kyle, and Kenneth M. Stedman Astrovirology: Viral Diversity and Ecology in Extreme Environments. AbSciCon2010. April 26-29, 2010, League City, TX, USA.

2009:

* Caleb Marceau, Michael Ceballos, and Kenneth Stedman, Astonishing host range variation in the hyperthermophilic *Fusellovirus* family. ASV 2009. July 11-15, 2009, Vancouver, British Columbia, Canada.

2008:

* Caleb Marceau, Kayleigh Blair, Blake Wombold. Rachael Marie Ceballos, Michael Ceballos, Kenneth Stedman Sulfolobus Spindle-shaped Viruses and Host Cross-Infection Studies. AbSciCon08. April 15-17, 2008, Santa Clara, CA. USA.

2007:

* Maria Herrera, Adam Sandes, Random [Diessner](mailto:random@pdx.edu), and Kenneth Stedman. A Novel Hypermotile Thermoacidophilic Archaeon: Reclassification of the Sulfolobales? . Gordon Conference on Archaea: August 19-24, 2007 Andover, New Hampshire,. USA.
* M. Herrera, A. Sandes, R. [Diessner](mailto:random@pdx.edu), and K. Stedman. Characterization of a Novel Hypermotile Thermoacidophilic Archaeon. ASM-Northwest Branch Meeting. March 9-11, 2007, Seattle Washington, USA. Won poster presentation award.

2006:

* K. Stedman, A. Clore, Y. Combet-Blanc, R. Diessner, M. Lambert, S. Morris. Diversity, Genomes, and Stability of Viruses of the hyperthermophilic archaeaon Sulfolobus. ASM-Northwest Branch Meeting. March 10-12, 2006, Seattle Washington, USA.

2005:

* A. Clore and K. Stedman. Genetic Studies on the Viral Integrase from SSV1. Gordon Conference on Archaea: August 14-18, 2005 Magdalene College, Oxford, UK.
* K. Stedman, A. Clore, G. Rice, J. Snyder, J. Spuhler, L. Tang, J.E. Johnson, M. Young. Novel Viruses from Yellowstone and Lassen Volcanic National Parks. The 13th International Congress of Virology, Joint meeting of the International Union of Microbiological Societies 2005. July 23-28, 2005 San Fransciso, California, USA.
* K. Stedman and B. Blumberg. The NAI-Virus Focus Group. NAI 2005, April 10-14, 2005 Boulder, Colorado, USA.
* K. Stedman, G. Rice, L.Tang, J. E. Johnson and M. Young. Ancient Viruses from Extreme Environments?. NAI 2005, April 10-14, 2005 Boulder, Colorado, USA.

2004:

* Clore, and K. Stedman. Functions of Cryptic Viral ORFs in Fuselloviridae. Extremophiles 2004: 5th International Conference on Extremophiles, September 19-23, 2004, Cambridge Maryland, USA.
* M. Young, L. Tang, J. Snyder, K. Stedman, F. Roberto, T. Douglas, and J. E. Johnson. Archaeal Viruses from High Temperature Environments. Extremophiles 2004: 5th International Conference on Extremophiles, September 19-23, 2004, Cambridge Maryland, USA.
* Y. Combet-Blanc, B. Wiedenheft, M. Young, W. Zillig, and K. Stedman. Comparative Genomics and Diversity of Viruses of Extreme Archaeal Thermophiles. Extremophiles 2004: 5th International Conference on Extremophiles, September 19-23, 2004, Cambridge Maryland, USA.
* K. Stedman, Y. Combet-Blanc, R. Diessner, J. Snyder, B. Wiedenheft, and, M. J. Young. Comparative Genomics and Diversity of Viruses of Extreme Archaeal Thermophiles. American Society for Microbiology Conference on the New Phage Biology August 1 - 5, 2004 Key Biscayne, Florida, USA.
* K. Stedman, G. Rice, L. Tang, J. E. Johnson, and M. Young. STIV; Indications for ancestral icosahedral viruses. American Society for Microbiology Conference on the New Phage Biology August 1 - 5, 2004 Key Biscayne, Florida, USA.

2003:

* J. C. Snyder, J. Spuhler, B. Wiedenheft, D. Mogk, K. M. Stedman, F. Roberto, T. Douglas, and M. Young. Monitoring Viral Diversity and Changing Population Structure in Response to Changing Geochemistry and Time in Yellowstone National Park. First Biannual Workshop on Geothermal Biology and Geochemistry in Yellowstone National Park, October 9-11, 2003.
* G. Rice, L. Tang, K. M. Stedman, F. Roberto, J. Spuhler, J.E. Johnson, T. Douglas and M. Young**.** The structure of a thermophilic archaeal virus shows that a ds DNA viral capsid type spans all domains of life. First Biannual Workshop on Geothermal Biology and Geochemistry in Yellowstone National Park, October 9-11, 2003.
* K. Stedman, A. Gleske, P. Kraft, A. Oeckinghaus, D. Kuemmel, M. Lawrence, G. Rice, F. Roberto, G. Sellek, J. Snyder, J. Spuhler, B. Wiedenheft, D. Willits, M. Young, L. Tang, J. E. Johnson, and W. Zillig. Advances in the study of viruses from thermophilic Archaea: Gordon conference on Archaea. August 3-8, 2003 Andover, New Hampshire, U.S.A.
* K. Stedman, Y. Combet-Blanc, L. Zoeller, Q. She, R. Garrett, G. Rice, B.Wiedenheft, M. Young, F. Roberto, W. Zillig. Comparative genomics of *Sulfolobus* viruses from Japan, Iceland, the U.S.A. and Russia. Extremophiles 2002, September 22-26, 2002 Naples, Italy.

2002:

* G. Rice, L. Tang, K. M. Stedman, J.E. Johnson, and M. Young. Novel viruses from High Temperature Thermal Environments in Yellowstone National Park. FASEB meeting on Viral Assembly. June 22-27, 2002. Saxons River Vermont, U.S.A.
* M. Jonuscheit, K. Stedman, E. Martusewitsch and C. Schleper. Development of a vector for high-level expression of proteins in the hyperthermophile *Sulfolobus solfataricus.* Extremophiles 2002, September 22-26, 2002. Naples, Italy
* G. Rice, L. Tang, K. M. Stedman, J.E. Johnson, and M. Young. Novel viruses from High Temperature Thermal Environments in Yellowstone National Park. Extremophiles 2002, September 22-26, 2002. Naples, Italy

1999:

* K.M. Stedman, E. Martusewisch, C. Schleper, and W. Zillig. Transformation of the extremely thermophilic Crenarchaeote *S.solfataricus* with viral vectors: Mutant complementation. Gordon Conference on Archaea, August 1-6, 1999 Andover, U.S.A.
* K. M. Stedman, Q. She, I. Holz, D. Prangishvili, H. Singh, R. A. Garrett. and W. Zillig. Conjugation in the Extremely Thermophilic Archaeon Sulfolobus: Plasmid Conservation and Variation. American Society for Microbiology 99th General Meeting, May 30-June 3, 1999, Chicago, U.S.A.
* K. Stedman, C. Schleper, E. Rumpf, and W. Zillig. Transformation in Extreme Thermophiles: A High Copy Number, Integrating Shuttle Vector for Sulfolobus solfataricus. Keystone Symposia on Archaea: Bridging the Gap between Bacteria and Eukarya, January 9-14, 1999, Taos, U.S.A.

1998:

* K. Stedman, C. Schleper, E. Rumpf, and W. Zillig. The Archaeal Virus SSV1: Genetic Determinants of Viral Function. Cold Spring Harbor Meeting on Molecular Genetics of Bacteria and Phages. August 25-30, 1998. Cold Spring Harbor, U.S.A.
* K. Stedman, C. Schleper, H.-P. Arnold, I. Holz, E. Rumpf, W. Zillig.

Vector Development for Thermophilic Archaea. Extremophiles '98. Jan 18-22, 1998. Yokohama, Japan.

1997:

* H.-P. Arnold, I. Holz, J. Kristiansson, D. Prangishvili, A. Schweier, K. Stedman and W. Zillig. Genetic Tools for the Extremely Thermophilic Archeaon Sulfolobus. First Meeting on Extremophiles as Cell Factories. April 19-21, 1997. Athens, Greece.

1994:

* K. Stedman, A. K. North, K. Klose and S. Kustu. Dimerization of the Enhancer Binding Protein NTRC, Another Function for the C-terminus. Keystone Symposium; Basic Aspects of Transcription, Feb. 13-20, 1994. Keystone, Colorado, U.S.A.

1993:

* K. Stedman, A. K. North K. Klose, and S. Kustu. Structural Aspects of the C-terminal Domain of NTRC. F.A.S.E.B. meeting; Control of Transcription Initiation in Prokaryotes, Aug. 1-4, 1993. Saxton's River, Vermont, U.S.A.

1989:

* K. M. Stedman, N. R. Movva, M. Zurini, P. Hiestand R. Keller. K. Memmert, S. Valente, R. Wenger and H. P. Kocher. One Step Affinity Purification of Highly Expressed Recombinant Human Cyclophilin (Peptidyl-Prolyl cis-trans isomerase). First Conference on Advances in Purification of Recombinant Proteins, March 14-17, 1989. Interlaken, Switzerland.

**Invited Speaker (72):**

2018: (1)

* “Viruses from Hell”, Biochemistry and Molecular Biology Department, University of Florida, 8 Feb 2018. Invited by graduate students.

2017: (2)

* “Viruses from Hell”, Integrated DNA Technologies (IDT), Coralville, Iowa. 9 October, 2017.
* “Viruses from Hell”, Department of Microbiology and Immunology, University of Iowa, Medical School. 10 October, 2017.

2016: (4)

* Ignite Health 4. Oregon Museum of Science and Industry (OMSI), “Beyond Zombie Viruses”. 16 Nov. 2016. ca. 250 paying guests. https://www.youtube.com/watch?v=I0kok72rR\_k&index=9&list=PLGFwZbE\_IDwcIh4vNrDVRWZN-3vl7A7ax&t=1s
* “Viruses from Hell, Part II” Department of Biological Sciences, California State University, Chico, 28 Oct. 2016.
* “Extreme Viruses: Structure and Function of the Unique Archaeal Virus SSV1” Microbiology and Molecular Biology Department, Brigham Young University, 20 Oct. 2016.
* “Viruses from Hell : Unique Viruses from Extreme Environments”. Danish Archaea Center, University of Copenhagen, Denmark, 15 January, 2016.

2015: (4)

* “Viruses from Hell” Bio/Nano Research Group, Autodesk Research. San Francisco, CA. 22 Sept. 2015
* “Viruses from Hell”. Department of Bio-and Environmental Science, University of Jyväskylä, Jyväskylä, Finland. 16 April 2015
* “Viruses from Hell: Unique Viruses from Extreme Environments.” Microbiology Student Association, Oregon State University, Research Symposium, Corvallis, Oregon 4 Apr. 2015. (Invited by students.)
* Suzanne Ott Prather Memorial Lecture. “Viruses from Hell: Unique Viruses from Extreme Environments.” School of Biological Sciences. University of Nebraska Lincoln, 26 Feb 2015. (Invited by graduate students.)

2014: (6)

* “Viruses from Hell : Part II” Department of Biochemistry and Molecular Biology, U.T. Medical Branch, 4 November 2014
* “Viruses from Hell” Molecular Virology and Microbiology and Tropical Medicine, Baylor College of Medicine, 5 November 2014
* Ignite Health V2. Oregon Health Sciences University, Portland State University, CLSB. Zombie Viruses for Enhanced Vaccination. 15 Oct. 2014. <http://www.techoregon.org/event?eventid=12079521173>
  + https://www.youtube.com/watch?v=UwX2uCW33nE
  + (Video)
* Viruses from Hell, Bumpass Hell. Cascade Volcanoes Observatory, USGS, Vancouver, WA. 31 July 2014.
* Viruses from Hell. University of Florida. Department of Microbiology and Cell Science, 17 March 2014.
* Viruses from Hell. San Diego State University. Biology Department. 20 March 2014

2013: (8)

* Viruses from Hell. Thermal Biology Institute, Montana State University. 5 Nov. 2013
* Viruses from Hell. Department of Biochemistry and Molecular Biology, OHSU. 15 Oct. 2013
* Invited participant in American Academy of Microbiology Colloquium, “The Uncharted Viral World”. July 11-12 San Francisco, CA, USA.
* Viruses from Hell. Department of Therapeutic Sciences and Bioengineering, University of California, San Francisco, 10 June 2013
* Viruses from Hell. Centro Severo Ochoa, Autonomous University of Madrid. 13 June 2013.
* Viruses from Hell (and beyond). Spanish Center for Astrobiology, Madrid Spain. 14 June, 2013.
* Viruses from Hell : Unusual Viruses from Extreme and other) environments. Cornell University, Microbiology Department. 14 March, 2013
* Viruses from Hell (and Beyond) : A Primer on Astrovirology. Canadian Astrobiology Training Program. 30 Jan 2013 (Recorded on the WWW)

2011: (4)

* Viruses from Hell, Part II, Metaviromics, Extreme Mutant Viruses, and Virus Fossils. Sonderkolloquium Biologischen Kolloquiums Christian-Albrechts-Universität zu Kiel, 14 June 2011.
* Viruses from Hell: RZBB-Kolloquium, Faculty of Biology and Preclinical Medicine, Department of Microbiology, Universität Regensburg, 19 May 2011
* Viruses from Hell: Max Planck Institute for Terrestrial Microbiology, 14 March 2011.
* The news from Mono Lake, where the conditions are extreme, the researchers are opinionated and the microbes are all above average. The Maseeh Mathematics and Statistics Colloquium Series. PSU <http://www.mth.pdx.edu/events/colloquium.asp?id=263>. 7 Jan 2011.

2010: (2)

* Quo vadis Astrovirology? NASA Astrobiology Institute Director’s Seminar. (Presented Online) 25 Oct. 2010.
* Viruses from Hell : Unique Viruses from Extreme Environments. [Sealy Center for Structural Biology and Molecular Biophysics](http://www.scsb.utmb.edu/). University of Texas Medical Branch, Galveston, Texas. 30 April, 2010

2009: (2)

* Viruses from Hell : Viruses of the extreme thermoacidophile Sulfolobus. Biology Department, Copenhagen University, Denmark. 11 May, 2009
* Viruses from Hell : From Portland to Kiel, Biologisches Kolloquium, Christian-Albrechts Universität zu Kiel, Germany. 27 April, 2009.

2008: (4)

* Invited to present to the National Academy of Sciences, Space Studies Board, Committee on the Origins and Evolution of Life. 28 Oct. 2008.
* Viruses from Hell: Genetics and Genomics of Sulfolobus viruses. Institut für Algemeine Mikrobiologie, Christian-Albrechts Universität zu Kiel, Germany. 29 April, 2008
* Viruses from Hell: Molecular Tools to Study Sulfolobus Transcription. Biozentrum Klein Flottbeck, Universität Hamburg, 28 April, 2008.
* Viruses from Hell: Finding, Characterizing and Modifying Extreme Viruses. OHSU/OGI, Department of Environmental and Biomolecular Systems. 11 April 2008

2006 (2)

* Salish-Kootenai College, Pablo Montana, 8 December, 2006.
* “Viruses from Hell” PSU Geology Department, 29 November, 2006

2005: (4)

* “Viruses from Hell” Novartis Institutes for Biomedical Research Basel. Switzerland 23 August, 2005
* “Viruses from Hell” University of California, Irvine. 6 May, 2005
* “Viruses from Hell” California State University, Chico. 22 April, 2005
* “Viruses from Hell” BHP-Billiton Johannesburg Technology Center. South Africa. 17 March, 2005 (Part of 2 week visit as “visiting scholar”.)

2004: (3)

* “Viruses from Hell” Washington State University, Vancouver. 15 November, 2004.
* “Hot Viruses in the Hood”, Portland State University, Biology Department, 21 October, 2004
* "Viruses from Hell: Genetics, Genomics and Evolution". Keynote Speaker, UC-Berkeley 5th Annual Interdepartmental Student Microbiology Symposium Saturday, 10 April, 2004. (invited by students). Previous speakers include: Susan Goldman, Bonnie Bassler, Rich Lenski, Gary Schoolnik

2003: (5)

* “Viruses from Hell” Biology Department, Reed College, 31 October 2003
* “Viruses from Hell, Bumpass Hell” Biology Department Humboldt State University, 26 September, 2003 (invited by students).
* “Life in Boiling Acid: Extreme Viruses” Apprenticeships in Science and Engineering (High school students) Midsummer Conference. Oregon State University, 11 July, 2003.
* "Hot Viruses: Genetic Elements of *Sulfolobus*" Molecular Microbiology and Immunology Department, Oregon Health Sciences University, 27 May, 2003

2002 (4)

* "Hot Viruses: Genetic Elements of *Sulfolobus*" Molecular Biology and Microbiology Department, Oregon Graduate Institute, Oregon Health Sciences University, 22 November, 2002
* “A Molecular Biology Primer”, Guest lecture in Mathematics 607, Seminar in Computational Biology. Mathematics Department, Portland State University. 15 April 2002
* “Life in Boiling Acid: Viruses of *Sulfolobus*” Chemistry Department, Portland State University, 10 May 2002
* “Hot Viruses: Genetic elements of *Sulfolobus* “BIOLab, Biology Interactive Outreach Spring Symposium, Portland State University, 6 April 2002

2001: (2)

* New England Biolabs, Boston, U.S.A. August 2001
* ATCC Workshop on Extremophiles, Baltimore, U.S.A. July 2001

2000: (3)

* ATCC Workshop on Extremophiles, Baltimore, U.S.A. July 2000
* Biology Department, Portland State University, U.S.A. May 2000
* Groningen University, The Netherlands. April 2000

1990s (14)

* Free University of Brussels, Belgium. November 1999
* Montana State University, U.S.A. July 1999
* Max Planck Institut für Molekulare Genetik, Berlin, Germany. April, 1999
* The University of Denver, U.S.A. January, 1999
* Universität Regensburg, Germany. December, 1998
* University of Paris, XI, Orsay, France. November, 1998
* University of Naples, Frederico II, Italy. 27 October, 1998
* “Genetics Elements of Sulfolobus: Viruses and Plasmids” University of Rome, La Sapienza, Italy. October, 1998
* Consiglio Nazionale delle Ricerche, Naples, Italy. October, 1998
* “Genetic Elements of thermophilic Archaea: Plasmis, Viruses and Transposons” Center of Marine Biosciences, Baltimore, U.S.A. August, 1998
* Wageningen Agricultural University, The Netherlands. June, 1998
* Philipps University, Marburg, Germany. March, 1998
* Korea Research Institute for Biotechnology and Biosciences, Yusong, Korea. February, 1998
* University of California, Davis, U.S.A. January, 1998

**Professional Service:**

Editorial Board (4):

* Guest Editor “Viruses” Special Issue “Viral Recombination: Ecology, Evolution and Pathogenesis” (2017) http://www.mdpi.com/journal/viruses/special\_issues/viral\_recombination
* Biology Direct (2013-present)
* Microbiology Spectrum (ASM) (Jun 2012- present)
* Frontiers in Extreme Microbiology (Sept. 2010-present)

Peer reviewer (42 Journals):

* Applied Microbiology and Biotechnology (12Nov12)
* Applied and Environmental Microbiology (8Jan16)
* Archaea (26/3/07, 1Oct10, 13Nov12, 4Apr13)
* Archives of Virology (27/4/05, 30Aug16, 5Dec16)
* Archives of Microbiology (18/2/08, 8/5/08)
* Astrobiology (14/5/07, 31/7/07, 18/10/07, 16Jan13, 18Mar13)
* Biology Direct (13Apr15)
* Current Opinion in Microbiology (1Mar11)
* eLife (2Jun15)
* Encyclopedia of Life Sciences (15/05/07)
* Environmental Microbiology (28/12/07, 18Sep12, 10Feb18)
* Environmental Microbiology Reports (12Jun14)
* Extremophiles (21/2/05, 14/12/05, 18/4/06, 14/7/06, 5/10/06, 10/4/08, 21/5/09, 26Oct09, 31Dec09, 3Feb10, 28Sep10, 1Nov10, 6Dec10, 9Dec12, 22Sep13, 3Jan14. 15Sep15, 17Dec15)
* FEMS Letters (13/6/05)
* FEMS Microbial Ecology (20Jan11)
* Frontiers in (Extreme) Microbiology (6Jul12, 18Dec17)
* Frontiers in (Evolutionary and Genomic) Microbiology (18May15, 19Jun15)
* Fungal Biology (30Oct14)
* Geobiology (11/2/08, 13Aug09, 14Aug17)
* Geology (11Sep12)
* Genome Biology (25/4/07)
* ISME Journal (7Oct10, 7Oct14)
* Journal of Bacteriology (15Dec09, 24Feb10, 9Aug12, 13Nov17)
* Journal of General Virology (XXX, 4Oct2016)
* Journal of Molecular Evolution (3Apr15; 16Aug17)
* Journal of Virology (21/2/05, 10/3/05, 7Jun11, 24Jan12, 2July13)
* Life (30Dec12)
* Microbiology (21/3/08)
* Molecular Genetics and Genomics (11/04)
* Molecular Microbiology (1/2/03, 1/6/04, 23/3/09, 10Feb16, 30July16)
* Nature (20/12/04)
* Nature Reviews Microbiology (3/8/06; 26Jul17)
* Nucleic Acids Research (21Nov11)
* PLoS ONE (11Aug11, 6Oct11, 20Apr13)
* PNAS (22/6/07, 2Jan17, 2Feb17)
* Research in Microbiology
* Scientific Reports (26Jan11)
* Trends in Microbiology (6/6/05).
* Virology (20/1/06, 27/2/06, 10/5/06, 7/11/06, 29/1/07, 9Feb11, 30Jul14, 23Sep14, 11Sep15)
* Virus Evolution (25Jul16)
* Virus Genes (21/2/06)
* Viruses (10Sept14, 20Jan16, 6Sep17)

Peer reviewer (Book Chapters)

* Reviews in Mineralogy and Geochemistry (25Jul12)

Ad hoc reviewer (Granting agencies, 11):

* Agence National de la Recherche (French National Research Agency)
  + JCJC (14 May 2017)
* BSF – US-Israel Binational Science Foundation
  + Transformative Science program (26Sept2017)
* CRDF (U.S. Civilian Research and Development Foundation)
* DOE - US-Department of Energy
* Flanders Research Foundation (FWO)
  + Functional Biology (24 May, 2011)
* IDT Integrated DNA Technologies
  + 2017 Synthetic Biology Grant, 11 Sept. 2017
* NASA
  + NPP Postdoctoral program (3 May, 2006, August 2011, 24 Sept 2013),
  + Maine NASA-EPSCoR, (8 Nov, 2006, 21 Dec. 2006)
  + NASA Exobiology (10/6/07)
* Netherlands Organization for Scientific Research
  + Earth and Life Sciences (13 Nov., 2007)
* New Zealand Ministry of Science and Innovation
  + 2013 Science Investment Round (9 May, 2013)
* NSF
  + IOS – Symbiosis, Defense and Self-Recognition (10 Oct. 2016)
  + DEB – Systematics and Biodiversity Science (29 Sep 2015, 12 Sep 2017)
  + IOS – Organism – Environment Interactions (6 Sept. 2013)
  + Dimensions in Biodiversity: (24 June 2012)
  + MCB (1 Sep, 2007, 18 April, 2008, 28 Sept., 2010, 30 Aug 2013, 11 Feb 2014, 4 Sep 2014, 27 Feb 2017)
  + Biological Oceanography (9 Oct. 2009, 22 October 2009)
  + EAR – IF (5 May, 2010)
* Université de Liege
  + FP7-people-COFUND, BeIPD-COFUND (15 May 2014)

Grant Review Panel Service

* NSF
  + IOS/DEB Preproposal Panel, 24-25 April 2014 (remote)
* NASA
  + NASA Astrobiology Institute Panel CAN 3
  + NASA ASTEP Program Panel Review 17-20 Jan 2012
  + NASA Planetary Protection Panel Review, 15-17 Jan 2013

**Membership in professional societies:**

* American Society for Microbiology
* American Society for Virology, Lifetime member
* American Association for the Advancement of Science
* Oregon Nanoscience and Microtechnologies Institute
* International Society for Extremophiles
* Marie Curie Fellowship Association
* International Society for Microbial Ecology

**Additional Professional Service**

Ongoing:

* *Chair NASA Virus Focus Group (since the passing of Baruch Blumberg). 2011-*
* *Member NASA Astrobiology Institute, MIT Lead Team, Feb 2014-*
* *International Committee on Taxonomy of Viruses: Prokaryotic viruses Subcommittee: 2000-present*

2017

* Member International Advisory Board for Extremophiles2018, Ischia, Italy.

2016

* External Ph.D. Examiner, University of Helsinki, Oct 2016
* External Ph.D. Committee Member. University of Copenhagen, 15 Jan, 2016

2015

* Member Scientific Organizing Committee for Thermophiles 2015, Santiago Chile.
* Session Chair, Viruses II, Thermophiles 2015, Santiago Chile.
* “Opponent” Ph.D. Defense of Alice Pawlowski, University of Jyväskylä, Jyväskylä, Finland, 17 April 2015

2014

* Evaluation of file for 3rd year review for Dr. Adam Abate, UCSF, 29 December 2014.

2013

* Chair session at West Coast Bacterial Physiologists Annual Asilomar Meeting. Pacific

Grove, CA, USA 13-15 Dec. 2013.

* Member NASA Astrobiology Institute, NASA-Ames Lead Team, Feb 2010-Dec 2013
* Evaluation of file for promotion to Associate Professor with tenure for Dr. Elizabeth Dinsdale, San Diego State University. 25 September, 2013
* Evaluation of file for promotion to Associate Professor with tenure for Dr. José de la Torre, San Francisco State University. 7 August, 2013

2012

* Consulted on documentary film on "Red Rain" of Kerala southern India for the Discovery Science Channel: Provide information on Sulfolobus to Katie Boxer

Researcher, Dark Matters, Wide-Eyed Entertainment (UK). Sept. 2012.

* Guest host on This Week in Virology, episode 195: <http://www.twiv.tv>. Ca. 2 hour interview/discussion of Diemer and Stedman, Biology Direct 2012. Netcast, 12 Aug, 2012.
* Provided picture for McGraw-Hill Higher Education for Willey et al: Prescott's Microbiology, 9/e ISBN: 0-07-340240-0  Digital ISBN: 0-07-751063-1, Jan, 2013 Language(s): English, plus Korean and Chinese Distribution: World Quantity: up to 60,000, including e-book, customized versions, and password protected accompanying book support website. Size: 1/4 page interior
* Evaluation of promotion file for promotion to Associate Professor for Dr. Holly Simon, Oregon Health and Science University. 20 March, 2012
* Invited participant in NASA/ESA Planetary Protection-Life Detection Workshop, Feb 13-17, 2012, La Jolla, CA.

2011

* Session Chair West Coast Bacterial Physiologists Annual Asilomar Meeting. 9-11 Dec., 2011. Pacific Grove, CA., USA.
* Chair (Elected) Gordon Research Conference on Archaea: Ecology, Metabolism and Molecular Biology. Waterville Valley, New Hampshire, Aug. 1-6, 2011.
  + Inducted into GRC “Hall of Fame” (for exemplary chairmanship)

2010

* External Ph.D. Thesis examiner “rapporteur” for Ms. Claire Geslin, Université de Brest, Brest, France, 10 Dec. 2010.

2008

* Judge Poster and Oral presentations at the Annual Biomedical Research Conference for Minority Students (ABRCMS), Nov. 5-8, 2008., Orlando, FL, USA
* Organize and Chair Astrovirology session at AbSciCon08. April 15-17, 2008, Santa Clara, CA. USA.
* Evaluation of file for promotion to Full Professor for Dr. Sohail Qureshi for the Aga Khan University, 25 March, 2008

2007

* Evaluation of file for promotion to Associate Professor with tenure for Dr. Scott Kelley, San Diego State University. 24 September, 2007
* Invited Reviewer for Brock, Microbiology, Microbiology Textbook, Chapter 17, Archaea. Jan. 22, 2007.
* Collaboration established with Salish-Kootenai (Tribal) College, Pablo, Montana for NSF grant proposal and NASA-MIRS support, with R. Michael Ceballos, instructor.

2006

* Organized NASA Astrobiology Institute Virus Focus Group Lassen Workshop and Field Trip, 25-27 June, 2006. Childs Meadows, California, USA.
* Sulfolobus DNA sent to Steve Giovannoni, OSU, July, 2006
* LacS DNA sent to John Leigh’s lab, U. Washington, July 2006.

2005

* Co-chair , convener and organizer of the Symposium Session “Diversity of Archaea” at The 9th International Congress of Bacteriology and Applied Microbiology, Joint meeting of the International Union of Microbiological Societies 2005. July 23-28, 2005 San Fransciso, California, USA.
* Sent *Sulfolobus* plasmids to Albert Bolhuis, University of Warwick, England, Nov. 2005

2004

* External evaluator for group leader position, Centre National de la Recherche Scientifique (CNRS), Orsay France. August 2004.
* External Ph.D. Advisor for Junaid Iqbal, The Aga Khan University, Karachi, Pakistan.
* Organized NASA-Astrobiology Institute Virus Focus Group Mono-Mammoth Workshop and Field Trip, 22-24 June, 2004. Mammoth lakes, California, USA.
* Organized and co-chaired Astrovirology Session at Third Astrobiology Science Conference. 28 March – 1 April, 2004. NASA-Ames, California, USA.
* Co-Chair (with Anna-Louise Reysenbach) Program Committee, Extremophiles 04, 19-23 September, 2004
* Sent *Sulfolobus* plasmids and cells to Jill Fuss, Lawrence Berkeley Labs. May 2004

2003

* Organized and hosted NASA-Astrobiology Institute Virus Focus Group Workshop, 16-17 October, 2003, Portland, Oregon.
* *Co-Chair (with Baruch Blumberg, Nobel Laureate) NASA-Astrobiology Institute Virus Focus Group. October 2003-April 2011.*
* Provided *Sulfolobus* cells to Woods Hole Bacterial Diversity course (Emergency). To Alfred Spormann, 22 July, 2003
* Sent *Sulfolobus* DNA to Paula Londei/David Hasenoehrl (Rome/Vienna) 13 Feb., 2003
* Sent plasmid DNA to David Bowling, CSIRO, Australia 13 Feb., 2003

Pre-2003

* Organizer, First International TBI Symposium on Thermophilic Archaea, 2001
* Co-organizer and Chair, MCFA-IPR Symposium Munich, 1999
* National Coordinator, MCFA-Germany, 1998-1999
* Session Chair, Gordon Conference on Archaea, 1999

**Oregon University System Service:**

* *Oregon University System. Germany Advisory Board, 2002-present.*
* Host tour of PSU Campus for Baden-Wuertenberg Minister of Science Research and the Arts, Jürgen Walter, and rest of Baden-Wuertenberg 45th anniversary delegation (including university presidents of Tuebingen and Stuttgart). 4 Sept. 2013
* Host University of Stuttgart Orchestra Soloists during visit to Oregon as part of the anniversary of the Baden-Wuertenberg-Oregon exchange program. 29 May – 1 June, 2003.
* Host Minister Peter Frankenberg, Baden-Wuertenberg Minister of Science Research and the Arts. May 31st, 2005.

**Portland State University Service:**

*Ongoing:*

* *Portland State University Education Policy Committee Fall 2015-present*
* *Portland State University Faculty Senate, (elected) Fall 2014-present*
* *Portland State University Institutional Biosafety Committee (IBC)* ***Chair :*** *16 Aug 2012- present*
* *PSU Research Integrity Advisory Group : October 2012-present*
* *Portland State University Biosafety Committee Member ; July 2006-present.*
* *Member Operations Committee of the Center for Electron Microscopy and Nano-Fabrication.*
* *Portland State University SARS committee member. May 2003 – present.*
* *H.I.V. Committee, Portland State University. April 2002 - present*

2016:

* Explore PSU Majors 2016 participant. 23 Feb. 2016. Man Biology table and talk to prospective students.
* Attend President’s Scholarship Reception, 1 March 2016.

2015:

* Presented at PSU Neuroscience Club Mother’s Day Meeting “Happy Mother’s Day: Thanks to the Viruses”. 13 May 2015
* Participate at OMSI Gala with PSU President Wim Wievel, and vice president Jon Fink. 1 May 2015.
* Visit by ESL student, Sedigheh Fazil to Virology lecture, 27 Apr. 2015
* Explore PSU Majors, Advising Fair. 18 Feb. 2015
* PSU Research Advisory Council: Jan 2012-Jan 2015

2014:

* January Inside Portland State Article: Viruses that come back to life.
* Portland State Magazine : “Zombie Viruses” http://www.pdx.edu/magazine/news/zombie-viruses

2013:

* “People making a difference” Profile President’s Progress Report, 25 Feb. 2013. <http://www.pdx.edu/news/presidents-progress-report-2013-people-making-difference>. Also published as insert in Oregonian, 6 March, 2013.
* Serve on CLAS Development Task Force, Winter Quarter 2013

2012:

* Nov. 12- Search Committee: PSU RSP Grants and Agreements Officers and Analysts (9 positions)
* Presentation at PSU Foundation Board Retreat “Did You Know?”, 27 September, 2012
* 2 Oct. 2012-2013: Faculty Grievance Panel, Portland State University
* 24 May: Participate in Bologna-Portland Sister City Videoconference in honor of Mario Capecci
* 13 April: Pacific Islanders Inservice participant.

2011: Photo and interview in PSU Donors Guide.

2010:

* 3 May. 2010: Interview Director candidate for Systems Science Program, Tom Keller.
* Portland State University Biosafety Committee Chair: June 2005-September 2010

2009:

* Meet with Alan Hein, MIT, 29 Oct, 2009 (and 2007, and 8)
* Science Advisor for Portland Water Capstone, Winter 2009
* Umbrella Tour Visit, 13 March 2009

2008:

* Photography for Admissions materials: Melissa Trifiletti, 25 June, 2008.
* X-presso tour of the Sciences: CLAS Friday Aug 10th, 2007. Presentation.

Pre 2008:

* Invited and hosted special Seminar speaker, Dr. Malcolm White, 17 Aug., 2004.
* Speaker at Friends of Italian Studies Dinner for support of an Italian Studies Program at Portland State University, 3 Oct. 2002 (College of Liberal Arts and Sciences Development function).
* Advisor to Search committee for University Studies Faculty Search, Portland State University. June 2002.
* Search Committee, Outdoor Program Director, Portland State University. May 2002- August 2002
* WWW site: Center for Life in Extreme Environments at Portland State University. Created and Maintained to 2004.
* Meet with staffers from Sen. Wyden's office 16 Jan, 2003
* Visit with Ron Henry, Provost Georgia State University, 6 Feb 2003
* Help Prepare Germany trip for President Dan Bernstein (with Don McClave) 13 Aug. 2003
* Visit of Stedman lab by Umbrella Tour 11 March 2003, 24 Feb. 2004, 15 May, 2007,
* Visit of Stedman lab to OUS Vice-Chancellor, 25 June, 2003.
* Prepare visit by Congressman David Wu (14/8/03), later cancelled.
* President's internationalization initiative meeting, 6 March, 2003
* In PSU/CLAS wallet public relations folder.
* Part of successful McNair Scholar grant proposal by Portland State University, 2002.

**Biology Department Service (Selected):**

* *Research and Development committee chair, Biology Department, Portland State University 2014-*
* Fill in for Biology Chair: 4-6 Jan 2017.
* Promotion and Tenure Committee Biology Department, Portland State University (elected). 2011-2013.
* Guest Lectures in:
  + Principles of Biology (F2017)
  + Microbiology (F2002; F2014, F2015, Sp2017)
  + Genetics (W2004, W2008, W2010)
  + Human Genetics (W2008)
  + Microbial Ecology (S2008, S2010, F2016, F2017)
* Front person for Biology Department PhD. Program proposal. Approved unanimously by State Board of Higher Education, March 2nd, 2006.
* Undergraduate Advisor for Microbiology and Molecular Biology Track students. ca. 20 e-mails and 4-5 in person advising sessions per month.
* Promotion and Tenure Committee Biology Department, Portland State University. 2003-2005.
* Futures Committee: Biology Department, Portland State University. 2003-present.
* Curriculum Committee Chair, Biology Department, Portland State University. 2003-2011.
* Chair Search Committee, Genetics, Biology Department, Portland State University. August 2004 – Jan. 2005
* Search Committee, Microbial Physiologist, Biology Department, Portland State University. August 2004 – April 2005
* Search Committee, Prokaryotic Molecular Biology, Biology Department, Portland State University. Oct. 2001 – May 2002
* Departmental Seminar Committee, Biology Department, Portland State University. Sept. 2001-
* Search Committee, Genomics, Biology Department, Portland State University. May 2002 – July 2002
* Search Committee: Biology Prep. Lab Coordinator, 2003.
* Consultant/Office hours for Theory of Recombinant DNA techniques: Biology 430/530, Spring 2002
* Co-teach Cell Biology and instructor of record for Cell Biology Lab Fall 2002 (Additional teaching load to substitute for Dr. David Boone.)
* Choose nominators for John Eliot Allen Award, April 18th, 2006.

**Selected Community Service:**

Ongoing

* *PCC Biosciences Program Advisory Board. 2004-present*

2018

* Build a Virus with Ken. Meet a Scientist at OMSI. 13 Jan 2018

2017

* Host St. Mary’s School Research Practices Class visit to Portland State University, CLEE. 14 Nov 2017

2016

* Host Pacific Northwest College of Art Evolution class on “Viruses Rock”. Lecture, lab visit and poster session. 9 March, 2016.

2015

* Host St. Mary’s School Research Practices Class visit to Portland State University, CLEE. 1 Dec 2015
* Provide information to Ethan Brown, High school student from McCracken County High School in Kentucky for Virus influences on eukaryogenesis.
* OMSI – Nanoland Exhibit. Opened 17 July 2015 (1/4 of exhibit and 4 quotes).
* Skype with Keys Middle School in Menlo Park California, answer questions about Astrobiology, Exttemophiles and Viruses. 22 April 2015
* Sulfolobus image provided for NOVA Labs evolution and phylogeny project, 5 March 2015 (to be launched in April 2015)
* Letter read on TWiV 318. 4 Jan 2015

2014

* OMSI Science Pub, “Viruses from Hell” Mission Theatre Portland, 15 Apr 2014, XYZ attendees
  + <http://www.mcmenamins.com/events/123905-Viruses-from-Hell-A-Voyage-of-Discovery>
  + Capacity house of 270. At least 20 turned away.
* Presentation of my research at Beaverton Health Sciences High School, 20 Feb 2014. (ca. 50 Sophomores, Juniors and Seniors)
* Interview with High School Student Gavin McMinn, 19 Feb 2014.

Pre 2014

* OMSI Science Pub, “Viruses from Hell” Venetian Theatre Hillsboro, 26 Aug 2013, 236 attendees
* Host St. Mary’s Academy (High school) class: “Scientific Research Methods”: 14 Dec. 2012
* Supplied photographs for The Virus World iPad App. Dec. 2010.
* Oregon Islamic Academy: Consult on Science fair Project: 15 Jan, 2009.
* Collaborator with Native American Research Lab, University of Montana. 2008-
* Present to middle school students (7th to 10th grade) from the Oregon Islamic Academy, 30 Oct. 2008.
* Visit to Coleen Swihart’s Advanced Placement Biology class at Canby High School (by Adam Clore), April, 2006.
* Host Lila Burunov, St. Mary’s Academy high school student for 3 months: Feb-May 2006.
* Host St. Mary’s Academy (High school) class: “Scientific Research Methods”: 27 Sept. 2005
* Provide photographic material for The Jason Project “Mysteries of Earth and Mars” middle school science curriculum. March 5th, 2005.
* Host Coleen Swihart, High School Teacher from Canby High School and Michelle Hansen from Hermiston High School, Oregon in Stedman lab: 18 Aug, 2004.
* Speaker at Saturday Academy's Apprenticeships in Science and Engineering (ASE) summer conference at Oregon State University, 11 July, 2003.
* Speaker at Bio-Rad Biology Teachers Symposium PSU, 7 Oct. 2003.
* Speaker at Biology teachers Outreach Symposium for middle and high-school biology teachers. 24 April, 2003.
* Participate in Genomics for High School teachers workshop, 26-27 June 2003.
* Host Trudy Swan, High School Teacher from Keiser High School in Salem, Oregon in Stedman lab: 31 July, 2003
* Science Fair Judging
  + Northwest Science Expo, 30 March, 2003
  + Northwest Science Expo, 2 April, 2004, Head Category Judge, High School Microbiology
  + Volunteer Grand Awards judge for the 2004 Intel International Science and Engineering Fair in Portland, Oregon, 11 and 12 May, 2004.
  + Winterhaven School Science Fair, 6 Dec. 2007.
* Visit to lecture from Upward Bound program at Portland State University. 2 Oct. 2002
* New York Hall of Science: Consultant for Astrobiology Exhibit and material supplied (cited at Second Astrobiology Science Meeting by Martin Weiss/New York Hall of Science in invited talk “From ET to AB: Public Perceptions of Astrobiology and How Museums Can Help”). Exhibit in preparation.
* California Academy of Science, supply photographic material for exhibit on extremophiles.
* Consultant to Oregon Episcopal School Science Projects: Fall and Winter 2002
* High School class visit from Jeff Culp, Evergreen School District, Heritage High School, Vancouver, WA, 21 Nov. 2002
* Tutor: Classroom Partners, Emeryville High School. 1995-1996

**Selected Press/Outreach:**

*Production (and protagonist) of documentary film “Edge of Life” on the ‘good’ viruses. June 2012-present*

*Picture in Biological Science, Freeman, 2nd Edition. Chapter 27, Page 603, estimated circulation 30,000 copies worldwide (sophomore biology textbook).*

2017

* Visit to Stedman lab by Lincoln High School Biology course. 6 June 2017.
* News release: http://www.news-medical.net/news/20170522/Portland-State-biologist-receives-major-NASA-grant-to-study-evolution-of-viruses.aspx
* Virtual Science Lab with David Valenzuela’s Biomedical Science High School Class from Madison High School. Google Hangout, 11 May 2017.
* Interviewed by KATU News before March for Science: Friday April 21, 2017 http://katu.com/news/local/guide-portland-march-for-science-downtown-speaker-size-number-signs
* Interviewed by Oregon Public Broadcasting (OPB) News during March for Science: Saturday April 22, 2017 <http://www.opb.org/news/article/portland-march-for-science-earth-day/> Broadcast in Weekend Edition 23 April 2017 - https://soundcloud.com/opb/042217msmarch
* “Expert” panelist for “Science Stories by Professionals and Reseachers” and “Expert Reviewer” ComSciCon PNW. Seattle, WA March 24-25, 2017. (Invited by graduate students) http://comscicon.com/comscicon-pnw-2017-schedule

2016

* Finalist/Nominee for National Public Radio’s Golden Mole Award for Accidental Brilliance in Science. Posted on NPR on Feb 24, 2016. Winner announced on 1 March, 2016 on Morning Edition. <http://www.npr.org/2016/02/24/467805055/whoops-twelve-tales-of-accidental-brilliance-in-science>
* Top 5 in National Public Radio’s Golden Mole Award for Accidental Brilliance in Science. Video on YouTube: <https://www.youtube.com/watch?v=6pFZtJm8uI8> (March 1, 2016)

2015

* Contributing to Oregon Museum of Science and Industry (OMSI) genome exhibit.
* Major contribution, materials, text (quotes), proofreading and design : Nanoland Exhibit, Oregon Museum of Science and Industry. Opened 17 July 2015. Ca. ¼ of exhibit Stedman Lab material, 4 quotes.

2013

* Preserving Vaccines. *New York Times*. Donald G. McNiel, Jr. <http://www.nytimes.com/2013/12/24/health/preserving-vaccines.html>. 23 Dec. 2013
* KGW-TV 4 O’Clock News Influezna vaccination. Interview. <http://www.kgw.com/video/featured-videos/flu-shot-spray-kgw-marshall-230060361.html>. 30 Oct. 2013
* “Virus Hunter” PSU Communications poster and insert in Oregonian.

2012

* Jennifer Kyle presented at the NAI Ames Lead Team Meeting, June 2012. Virus Ecology: Implication for Preservation within the Microbial Record, http://amesteam.arc.nasa.gov/Research/mineralogic\_news.html
* KPSU: Faculty Friday Interview, 1 hour. 16 Nov. 2012
* Interview with Bob Holmes, New Scientist Magazine. 11 April, 2012

2011

* KGW-TV: Opening of CLEE/SRTC at PSU, featuring Mikaela Selby, Jennifer Kyle and the Stedman lab. 18 Oct. 2011. <http://www.kgw.com/news/business/PSU-Updates-Science-Research--Teaching-Center-132105833.html>
* In Search of Virus Fossils, Astrobiology Magazine. Michael Schirber 17 Oct. 2011

<http://www.astrobio.net/exclusive/4280/in-search-of-virus-fossils>

* + Featured on NASA Astrobiology Institute WWW site – 27 Oct, 2011.

2010

* Photos provided for iPad app “Virus Hunter” for the World of Viruses. 20 Dec. 2010.
* Morning update, KEX 1190, Radio interview with Paul Linnman ca. 5 minutes (live) RE: NASA press conference on As utilizing microbes and article in Science Express. 3 Dec. 2010 ~7:05am
* Tracking Viruses Back in Time, Astrobiology Magazine, Henry Bortman. 6 Sept. 2010. http://www.astrobio.net/exclusive/3609/tracking-viruses-back-in-time

2009

* Virtuose Viren. Kieler Nachrichten. 30 May, 2009 (German)
* Virtuose Viren. CAU Uni Zeitschrift. 30 May, 2009 (German)

2008

* MicrobeWorld Radio Interview: Bridgett Ennis. 24 June, 2008. Broadcast on Public Radio in USA, France and Spain, Nov. 3rd, 2008.
* Phone interview with Alicia Chang, Associated Press, 16 June, 2008: AP Wire service story. 22 June, 2008. “Can the Martian Arctic Sustain Extreme Life?” 2 quotes, distributed and published worldwide, from the New York and LA Times to OregonLive, Sina (China), and Tehran News (Iran).
* PSU Vanguard article, 15 April, 2008

2007

* Phone interview with Rachel Mosteller for Discover Magazine (Green Burial), 2007
* Canadian Broadcasting Corporation: “The Virus Hunters” broadcast, 15 (and 18) March. 2007, prime-time throughout Canada. Filmed June and August, 2006.

2006

* Ouest-France, Newspaper Article: 19 September, 2006 (French).
* Le Télégramme: Newspaper Article Milieux extremes. Une vie insoupconnée. 19 September, 2006. (French)

2004

* National Geographic News: “"Miracle" Microbes Thrive at Earth's Extremes” John Roach, 17 Sept, 2004 http://news.nationalgeographic.com/news/2004/09/0917\_040917\_extremophiles.html
* California Wild, “The Search for Aliens on Earth” Summer 2004, Carol Tang
* National Geographic Today (National Geographic Television), 10 June, 2003

2002

* Astrobiology News, “Prospecting for Viruses” 5 August, 2002. Anne Rosenthal http://www.astrobio.net/exclusive/246/prospecting-for-viruses
* U.S. News and World Report, “Viruses from Hell” 17 June, 2002, Charles Petit
* The Oregonian, “A nose for viruses” 21 August, 2002, Eric Hand

**Misc:**

* Invited to speak in plenary session at AbSciCon 2006, Washington, DC, March 26-30th. <http://abscicon2006.arc.nasa.gov/abscicon2006.html>. Declined.
* Invited to contribute book chapter on Archaebacteria for the PRACTICAL HANDBOOK OF MICROBIOLOGY. August 11th, 2006. Declined.
* Cited in Science: Whitaker et al., 2003, 301: 976-978.
* Cited in Science, 10 May 2002, Vol. 296, p 1077-1082: “A.L.R. is very grateful to Ken Stedman for sharing his broad knowledge of the Archaea”.
* Cited in Nature, Vol. 409, 22 Feb. 2001, 1092-1101. K. Stedman for life at high temperatures
* Cited in Journal of Bacteriology, July 2003, p. 3683-3689, Meeting Review, Extremophiles 2002, Rossi et al., “… in the poster session, K. Stedman (Portland State University) asserted that viruses. . . . “

**Representative teaching comment:**

“Best teacher I have had in 28 years” B. Edmunds. Bi338, Winter 2002.

**Letters of support for:**

* Melissa Kendall: IGERT program - Successful
* Neha Singh: Ph.D. Program, Accepted to OHSU.
* Sherry Cady, Rick Hugo (P.S.U.): Two letters of support for NSF equipment grant.
* Dr. Song Chong, Graduate of Dr. David Boone

**Previous Grants and Fellowships:**

* MCB 1243963 “Extreme Virus Morphology: The Structure and Assembly of SSV1, the Prototypical Fusellovirus” (**PI**) National Science Foundation, $402,150. Dates: Jan 2013 – Dec 2015. No cost extension granted to Dec. 2016. E/E/G/E/E
* Silica-coating of Vaccines. STTR Phase 0, PSU/StoneStable, Inc. Submitted to OCTRI on 27 Oct. 2015. Accepted for up to $5,000. 10 Nov. 2015
* “A Novel Mechanism for Unprecedented Viral DNA-RNA Recombination ; Preliminary Data Collection and Assay Development.” (**PI**) Faculty Enhancement Grant $14,956. (PSU Internal funding) 1 July 2013 – 1 July 2015.
* MCB 1036612 “RUI: MO: Collaborative Research: An Integrated Study of Eukaryotic, Prokaryotic and Viral Diversity in an Acidic Hot Lake” (**PI**) National Science Foundation, Microbial Observatories Program. $17,954. 1/1/08 – 12/31/12. REU Supplement. (No cost extension granted to 12/31/13)
* MCB 0702020 “RUI: MO: Collaborative Research: An Integrated Study of Eukaryotic, Prokaryotic and Viral Diversity in an Acidic Hot Lake” (**PI**) National Science Foundation, Microbial Observatories Program. $365,143. 1/1/08 – 12/31/12. (No cost extension granted to 12/31/13)
* “Virus Preservation in Silica, Halite, and Hot Spring Sediments” (**PI**) NASA Astrobiology Institute Directors Discretionary Fund. $44,339. Proposed dates. Nov 2010 - Oct. 2011 – No cost extension to July 2013. Grant #: NNA11AC01G
* Funding for Edge of Life Film Project – Astrovirology Segment, NASA Astrobiology Institute: $6,563,
* Support for “Edge of Life” film project. $1000 from Scion Research Association. 15 May 2013
* DBI 0963548 “Revitalizing Facilities for Research on Life in Extreme Environments” (CoI) $1,917,791. Dates: Jan 2010 – Dec. 2011.
* “MRI: Acquisition of an Analytical, Variable-pressure Scanning Electron Microscope for Geoscience Research and Education at Portland State University” (CoI) $238,943.: 08/01/09 - 7/31/10 Award number 0923450
* “Molecular and Genetic Investigations of RNA Stability in Hyperthermophilic Archaea” NASA, Exobiology. $380,441. (CoI with Dirk Iwata-Reuyl, Chemistry department). April 2007 – March 2010. Award number NNX07AJ26G
* “Biomolecular Substrates for Extraterrestrial Life: Revealing the Secrets of Extremophilic Archaea and their Viruses” NASA –EPSCoR Montana Space Grant program. $142,084 (to PSU) : 01/01/08 – 12/31/10 Award number NNX07AT63A. Subaward G258-08-W1951 (Hiscock PI)
* “2011 Archaea: Ecology, Metabolism and Molecular Biology Gordon Research Conference”, submitted to DOE, 7 Sept, 2010. $10,000 awarded. Grants.gov ID GRANT10688028 –
* “2011 Archaea: Ecology, Metabolism and Molecular Biology Gordon Research Conference”. National Science Foundation. MCB. $10,000 awarded. Fastlane ID: 1064012
* “2011 Archaea: Ecology, Metabolism and Molecular Biology Gordon Research Conference”, submitted to NASA, 16 Sept, 2010. $10,000 awarded. 10-EXO10-0002
* “’Missing links’ in Archaeal viruses : Characterization of the *Methanococcus voltae* strain A3 virus or viruses.” Alexander von Humboldt Foundation Research Fellowship for Experienced Researchers. 2009-2011, ca. $60,000.
* “Aberration-Corrected Photoelectron Microscope: Opening the Nanometer Scale for Organic Matter Microscopy” National Science Foundation DBI: 0352224. $740,990. Dates June 2004-December 2006. (Co-PI with Rolf Konenkamp and G.F. Rempfer, Physics department, PSU.)
* “*In vivo* Gene Regulation in the Extremely Thermophilic Archaeon *Sulfolobus* *solfataricus*.” American Heart Association Pacific-Mountain Affiliate Beginning Grant in Aid. Jan. 2004 – Dec. 2005. $110,000. AHA Award #0460002Z

## "Viruses from Yellowstone Thermal Acid Environments" MCB-0132156, funded in NSF Microbial Observatories Program. $749,920 (co-PI) 2002-2006, ca. $150,000 in subcontract.

## “Kinetic Characterization of *Toxoplasma gondii* Adenosine Kinase” Student Research Grant (to Johanna Rigas), Northwest Health Foundation. 8/01//2003-5/30/2004. $1500

## "Will the Archaeon Virus SSV1 Integrate into Its Host without Integrase?" Student Research Grant (to Adam Clore), Northwest Health Foundation. 5/1/2003-4/30/2004. $2947

## Internationalization Mini-Grant, Portland State University December 2003-June 2004 $700.

* Funding for NASA Astrobiology Institute Virus Focus Group Field Workshop, Lassen Volcanic National Park, California, June 25-27, 2006. $10,200 NASA Astrobiology Institute - Central.
* Funding for NASA Astrobiology Institute Virus Focus Group Field Workshop, Mammoth Lakes, California, June 21-23, 2004. $23,000 NASA Astrobiology Institute - Central.
* Funding for Astrovirology Session at the Third Astrobiology Science Conference. March 28th – April 1st, 2004. NASA-Ames, California, USA. $3855 NASA Astrobiology Institute – Central.
* Funding for NASA Astrobiology Institute Virus Focus Group Meeting, Portland, Oregon, October 16-17, 2003. $10,000 NASA Astrobiology Institute - Central.

## NSF-NATO Postdoctoral Fellowship, 1998-1999

## Marie-Curie Postdoctoral Research Fellowship from the European Union, 1996-1998.

<http://www.cordis.lu/biotech/trainees/cv/stedman.htm>

* “NASA Oregon Space Grant Undergraduate Research Scholarship to Nicole Paterson $5000, Dec. 2011.
* Professional Travel Grants and internal funding
  + To present at Thermophiles 2015, Santiago Chile ($4000).
  + To present at Thermophiles 2013, Sept 8-13, 2013 Regensburg Germany ($3000).
    - Also grant from FEMS – Invited Speaker Meeeting Grant
  + To chair session and present at the Viruses of Microbes Meeting, Paris, France, Summer 2010, $5000. NASA Astrobiology Institute.
  + To present at the Gordon Conference on Archaea: Ecology, Metabolism and Molecular Biology. Summer 2009 $1280 (PSU)
  + To judge at ABRCMS, 2008 (airfare from PSU), lodging and registration from ABRCMS
  + To present at the Gordon Conference on Archaea: Ecology, Metabolism and Molecular Biology. Summer 2007 $812.50 (PSU)
  + To present at Extremophiles 2006. Summer 2006 $1000. (PSU)
  + To present at the Gordon Conference on Archaea: Ecology, Metabolism and Molecular Biology. Summer 2005 $1250. (PSU)

## Competitive Second Year Summer Stipend, Portland State University, College of Liberal Arts and Sciences, 2003. $4000

* + Extremophiles September 2002, $2000 (PSU)

**Support of funded proposals (“other senior personnel”):**

* Advisor and active participant in the PSU-Oregon State Subsurface Biosphere Interdisciplinary Doctoral Program, funded by the NSF- Integrative Graduate Education and Research Traineeship (IGERT) program DGE:0114427: “Earth's Subsurface Biosphere: Microbial, Geophysical, and Geochemical Processes.”

## Advisor on NSF REU Site Grant: Applications of Microscopy and Microanalysis to Multidisciplinary Research. NSF-DMR-0353738 Prof. Jun Jiao, Physics department, PSU, PI. $207,000 April 2004 - March. 2007

## Advisor on NSF REU Site Grant : Enriching Research Experience in Nanometrology. NSF-DMR-0649280. Prof. Jun Jiao, Physics department, PSU, PI. $140,000. April 2007-March 2009

## Advisor on NSF REU Site Grant : NSF - DMR-1004737. Prof. Jun Jiao, Physics department, PSU, PI. $270,000. April 2010-March 2014

* Advisor on NSF REU Site Grant : NSF – DMR 1263339. Prof. Jun Jiao, Engineering and Erik Sanchez, Physics (Co-PIs). $310,000 Apr 2013-Mar 2017.

**Grant proposals Submitted but not funded (52):**

* “Parallel *in vitro* and *in vivo* gene regulation in the extremely thermophilic archaeon *Sulfolobus solfataricus”*Submitted to NSF-MCB program. Requested $481,994. Submitted 10 July, 2001. – Panel: Very Good (not funded). (VG, G, G, VG, VG, G)
* “*In vivo* Gene Regulation in the Extremely Thermophilic Archaeon *Sulfolobus* *solfataricus*.” Submitted to NSF-MCB program. Requested $570,274. Proposed dates: January 2003 – December 2005. Submitted 10 July, 2002. – Panel: Very Good/Good (not funded). (G, G, VG/G)
* “Recombinant Viruses to Study Biochemical Adaptations to Life in Extreme Environments:”
* Submitted to the Arnold and Mabel Beckman Foundation. $240,000 requested Proposed dates: April 2003 – March 2006 Submitted 1 Oct., 2002. Declined.
* “*In vivo* Gene Regulation in the Extremely Thermophilic Archaeon *Sulfolobus* *solfataricus*.” Submitted to American Heart Association Northwest Affiliate. $110,000 requested. Proposed dates: July 2003 – June 2005. Submitted 8 Jan., 2003. Score 1.8, 26th percentile,.
* “*In vivo* Gene Regulation in the Extremely Thermophilic Archaeon *Sulfolobus* *solfataricus*.” Submitted to American Heart Association Northwest Affiliate. $110,000 requested. Proposed dates: January 2004 – December 2005. Submitted 8 July, 2003. Score 1.74, 18.5% percentile (15.5% funded).
* “Collaborative Research:RNA Stabilization and Thermophily in Archaeal Hyperthermophiles” Submittedto the National Science Foundation. $386,540 requested. Proposed dates: March 2004-February 2006. Submitted 10 July 2003(Reviewers: E, VG/G, VG, VG) (Panel VG)
* “CAREER: Biochemical and Genetic Analysis of Fuselloviruses” Submittedto the National Science Foundation. $910,748 requested. Proposed dates: March 2004-February 2009. Submitted 22 July 2003 **(**Reviewers: VG, E/VG, VG, VG/G, G) (Panel VG).
* “UMEB: A Unified Undergraduate Learning Community in Environmental Biology at Portland State University.” Submitted to the National Science Foundation. $501,820 requested. Proposed Dates: May 2004 – April 2009. Submitted 31 Oct., 2003 Co-principle investigator on multi-PI proposal for Biology Department. “Fund if possible”.
* “Extreme viruses: Tools for Nanotechnology, Astrobiology, Protein Engineering and Extreme Environments”. Submitted to the Arnold and Mabel Beckman Foundation. $240,000 requested Proposed dates: April 2004 – March 2007 Submitted 1 Oct., 2003. Declined.
* “Collaborative Research: The Role of Archaeosine in Archaeal tRNA: tRNA Stability in Thermophiles?” Submitted to the National Science Foundation. $386,540 requested. Proposed dates: August 2004-July 2006. Submitted Jan 15th 2004 (Reviewers: E, E, E/VG, E, VG) (Panel G)
* “CAREER:Genetic Analysis of the Fusellovirus SSV1” Submitted to the National Science Foundation. $993,919 requested. Proposed Dates: 05/01/05 – 04/30/10. Submitted July 20th 2004 (Reviewers: E, E, VG/G, E, G) Panel (G).
* “Collaborative Research: Molecular and Genetic Investigation of the Role of tRNA Hypermodification in Archaea.” Submitted July 12th, 2004 to National Science Foundation. $386,540 requested. Proposed Dates: 03/01/05 - 02/28/07. Reviewers (G, VG, G) Panel (VG).
* “Engineering Extreme Viruses” Submitted to Beckman Foundation Young Investigator Program. $240,000 requested. Proposed dates: 06/01/05-05/30/08 Submitted Sept. 30th, 2004, Declined
* “RUI: MO: Collaborative Research: An Integrated Study of Eukaryotic, Prokaryotic and Viral Diversity in an Acidic Hot Lake” Submitted August 23rd, 2004 to the National Science Foundation. $482,956 requested. Proposed Dates: 04/01/05 – 03/30/10. (Reviewers: VG/G, G, VG, VG, VG, VG, VG) Panel Recommendation: Highly Meritorious, Rating Good.
* Co-PI; “Undergraduate Mentoring in Environmental Biology”, PI Holly Simon, OGI. Preproposal not recommended for complete proposal.
* “CAREER: Genetic Analysis of Fuselloviruses Structure and Function” Submitted19 July, 2005 to the National Science Foundation. $893,010 requested. Proposed dates: April 2006-March 2011. (Reviewers E, E, VG, VG, G, G), Panel VG. Declined.
* “RUI: MO: Collaborative Research: An Integrated Study of Eukaryotic, Prokaryotic and Viral Diversity in an Acidic Hot Lake” Submitted October 11th, 2005 to the National Science Foundation. $339,751 requested. Proposed Dates: 04/01/06 – 03/30/11. Panel Review: Highly Meritorius, G, E, E, VG, VG, E, VG/G (not funded)
* “UMEB: A synthesis approach to an undergraduate learning community in environmental biology “Senior Participant: Proposal No: 0603212 Submitted to NSF: October 17th, 2005, declined.
* HHMI Proposal: Lead for New, Current and Future Faculty section, submitted, October 10th, 2005. Declined.
* “Genetic Investigation of Fusellovirus Integrase” Submitted January 18th, 2006 to the National Science Foundation. $404,883 requested. Proposed dates: 10/01/06 – 9/30/09. Panel Review: Not Competitive, Individual reviews: VG, VG/G, VG/G. G/F, F, VG, P (not funded).
* “Stability of Extremophilic Viruses” White Paper submitted 27th, April 2006 to Department of Defense, Joint Science and Technology Office, Physical Science and Technology Division Basic Research Program of the Defense Threat Reduction Agency. In response to BAA: W911NF-06-R-0005. $100,000 proposed. Full proposal submission not recommended (expected funding of 10-50 proposals, >1000 white papers submitted).
* “Molecular and Genetic Investigations of tRNA Stability in Hyperthermophilic Archaea”. Submitted July 12th, 2006 to the National Science Foundation. $230,547 requested. Proposed dates: 02/01/07 – 01/31/10. Co-PI with Dirk Iwata-Reuyl, PSU Chemistry department. “Superior” Not recommended for funding. (VG, VG, G, VG)
* “Viral Mineralization in High-Silica Environments” Submitted to the National Science Foundation on 16 July, 2007. $206,020 Requested. Proposed dates: 15 June 2008-14 June 2011. Panel Review: “Not-competitive” Individual Reviews (G, VG, G/F, VG)
* “MRI: Acquisition of a Variable Pressure Scanning Electron Microscope at Portland State University” Submitted to NSF on 24 Jan, 2008, $490,757 requested. (CoI with Rick Hugo, PSU Geology) Panel Review: “Not-competitive” Individual Reviews (E, E G/F)
* “Astrogeochemistry at PEARL: From Molecules to Microbes … and Back.” *Submitted to* NASA Astrobiology Institute. (CoI with Niles Lehman, Chemistry Department with 13 others Co-Is). $7,709,339 requested. Proposed dates: Jan 1, 2009 - Dec 31, 2013, Recommended for funding.
* “Virus Silicification: Paleontological and Ecological Implications” Submitted to NSF, 15 July, 2008, $232,305 requested. Proposed dates: 1 July 2009 – 30 June 2012, 25th of 72 proposals considered. Panel review: “Competitive”. Individual Reviews (E, E/VG, E/VG, G).

## “The SSV1 Nanoparticle: Structure and Stability of a Hyperthermophilic Virus” Submitted to the NIH, 10 Dec, 2008. $423,276 requested. Proposed dates: 1 July, 2009 – 30 June 2011. Triaged, no score.

* “DMR: Instrumentation for Materials Research: Acquisition of Instrumentation for Electron Crystallography/Structural Fingerprinting Research and Education in the Pacific Northwest”, Submitted to the National Science Foundation on 4 Dec. 2009. $177,579 requested (Other senior personnel). Proposed Dates : Oct 2010-Sept.2011
* “Structure, Replication and Stability of the Extreme Virus SSV1”. NIH AREA Program: Submitted to NIH AREA program (PA-10-070), 30 June 2010. $441,332 requested. Proposed dates 1 July 2011- 30 June 2014 - Not Scored to be resubmitted Feb 25
* “Extreme Virus Morphology : The Structure and Assembly of SSV1” Submitted to NIH AREA program (PA-10-070), 23 February 2011. PI: $441,468 not scored. .
* “Extreme Virus Morphology: The Structure and Assembly of SSV1, the Prototypical Fusellovirus” Submitted to NSF on 6 September 2011, PI: $387,253 returned without review (Co-PI was on two proposals).
* “The preservation and biosignatures of lipid-containing viruses” Submitted to the National Science Foundation, 18 July, 2011. Requested: $317,837 Proposed Dates: 1 April 2012 – 30 March 2014. 1148457 – Panel Review “Not Competitive”. Individual Reviews (VG, VG, E, VG, VG/G, G)
* “Geo-virology : Biosignature Research at the Nano-scale” Submitted to PSU Faculty Enhancement Grant program. 2 March 2012. $14,805 requested. Proposed dates: July – Sept. 2012 – Declined score 6.3/10 (Funding at 7.5).
* “Phage Therapy for the Planet: Methanogen Viruses for Reduction of Anthropogenic Methane.” Human Frontier Science Program Letter of Intent. LIP000466/2013. Submitted 26 March, 2012. Full proposal not requested, 23 May, 2012
* “EAR: Identification of a virus-specific and geologically relevant lipid biomarker.” Submitted to the National Science Foundation on 17 Feb, 2012. $51,217 requested. Referred to BIO 3 April, 2012. Proposed dates: April 2012 – Sept. 2012 Proposal 1236162, Declined 13 June, 2012: E, VG, G reviews.
* “The Oregon NASA Astrobiology Institute : Networks of Life” Submitted to NASA 15 Feb. 2012. Proposal 12-NAI6-0038. CoI. $9,993,833 requested. Proposed dates Nov. 2012-Oct. 2017, notified that it would not be funded 5 Sept. 2012.
* Gordon and Betty Moore Foundation Marine Microbiology Initiative, application submitted 4 June 2012. Declined (over 200 applicants, )
* “Virus biosignatures in laboratory and environmental systems” Submitted to NASA Exobiology Program 2 March, 2012. $737,096 requested. Proposed dates: Oct. 2012 – Sept. 2016 – Not recommended for funding – 22 Nov. 2012 (13% recommended for funding)
* “Preparation for NIH submission of ‘A mechanism for RNA-DNA recombination’” Research Stimulus Award : ~$4,950. – Declined (PSU RSP).
* Travel Grant PSU Summer 2013: $1971, submitted 21 Feb. 2013. Declined (PSU OAA)
* Moore Foundation Data Driven Discovery Investigator Competition. Pre-Application submitted 24 Feb 2014 – Not selected for second round (93/1095 selected, 8.5%)

## “Single Dose Primary and Booster Vaccination using Silicified Vaccines”. Submitted to the Bill and Melinda Gates Foundation Grand Challenges Explorations Program. 5 May 2014. $100,000. Proposed dates : 1 Jan. 2015 – 30 June 2016. Declined 28 August 2014

* “The Transition from RNA to DNA in the Origins of Life”. Submitted to the Simon’s Foundation Collaboration on the Origins of Life Investigator Program. Submitted 11 Sept. 2014. Up to $2,000,000. Proposed dates : 1 Jan. 2015 – 31 Dec 2019. Declined
* Expression of Interest - Increasing the Potential of Marine Microeukaryotes as Experimental Model Systems through the Development of Genetic Tools. Gordon and Betty Moore Foundation. Submitted 15 Dec. 2014 – Declined 12 March 2015
* “Silica-Coated Vaccines : Sheep in Wolves’ Clothing” Letter of Intent Submitted to Grand Challenges in Global Health – New Interventions for Global Health. Bill and Melinda Gates Foundation, 12 Jan 2015. – Not selected for full proposal 18 April 2015 (“50/of over 1200”)
* Silica-coating of Vaccines. ONAMI Gap proposal, $250,000 submitted 18 May 2015, not recommended for funding, 21 May 2015.

## Giant Viruses in Extreme Environments. Submitted to NASA on 23 July 2015. Proposed dates 1 Jan 2016-31 Dec 2018. $874,379 requested. 15-EXO15\_2-0141. Declined 25 March, 2016

* Enhancement of a vaccine for Chikungunya virus by silica-coating. EXITO Pilot Proposal with Victor DeFillipis, OHSU/VGTI. Submitted via InfoReady. 12 Jan 2016. Proposed Dates: 1 July 2016-30 June 2017. $50,000 requested. First Round reviews, Impact: 2,3,5. Resubmitted with changes 10 March 2016. Second Round reviews Impact: 1,2,3. Not forwarded to NIH for funding.
* Collaborative Research; Fused Fullerene Cones and S-layers: Elucidating the Structure and Host Binding of the Fusellovirus SSV1, Submitted to NSF on 13 Nov. 2015. Proposed Dates 1 Jan 2017-31 Dec 2019. $375,006 requested. Proposal number 1614914.
* Silica Coating of Chikungunya Virus: Establishing Platform Technology for Enhanced Vaccine Formulation: NIH-NIAID-R21 with CoI Victor DeFilippis, OHSU. Proposed dates 07/01/17-06/30/19. $98,484 (for PSU) requested. Not scored, 24 Feb 2017.
* Megaviruses from Extreme Environments: NASA Exobiology Phase 2 proposal. Proposed Dates: 07/01/17-06/30/20. $820,664 Requested. “Not selectable” 9 Feb 2017
* Collaborative Research: Fused Fullerene Cones and S-layers: Elucidating the Structure and Host Binding of the Fusellovirus SSV1. NSF-MCB. Proposed dates 09/01/17-08/31/20. $423,384 Requested 15 Nov, 2016. Proposal number 1715676. Not funded 14 May 2017. Panel Review Medium priority (highest on panel 15/51). Reviews: VG, VG, VG, VG/G, VG.
* Genetic Analysis of Fuselloviruses EXITO Pilot Proposal Proposed Dates: 09/16/2017-09/15/2018. Submitted 2 Dec. 2016. $74,626 requested. First Round reviews, Impact: 5,3,1,5. Resubmitted with changes 9 June 2017. Second Round reviews Impact: 1,2,2,5. Not forwarded to NIH for funding.