

## Curriculum vitae

### **Personal Information**

Grant Jensen  
Dean of the College of Physical and Mathematical Sciences  
Brigham Young University  
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### **Education and Training**

1999 – 2002      Postdoctoral, field of Biophysics, Lawrence Berkeley National  
Laboratory, Berkeley, CA; Dr. Kenneth H. Downing, advisor  
1999              Doctorate, field of Biophysics, Stanford University, Palo Alto, CA; Prof.  
Roger D. Kornberg, advisor  
1994              Baccalaureate of Science, field of Physics, Brigham Young University,  
Provo, UT

### **Positions**

11/20 – present      *Dean*, Brigham Young University College of Physical and Mathematical  
Sciences  
7/17 – 10/22      *Director*, Caltech Center for Cryo-EM, California Institute of Technology  
10/10 – 10/22      *Professor of Biology and Biophysics*, California Institute of Technology  
4/10 – 10/22      *Adjunct Associate Professor*, Microbiology, Immunology, and Molecular  
Genetics, University of California Medical School, Los Angeles  
8/08 – 8/20      *Investigator*, Howard Hughes Medical Institute  
7/08 – 10/10      *Associate Professor of Biology*, California Institute of Technology  
7/02 – 7/08      *Assistant Professor of Biology*, California Institute of Technology  
12/99 – 6/02      *Post-doctoral fellow*, Lawrence Berkeley National Lab; Dr. Kenneth H.  
Downing, advisor  
1/95 – 12/99      *Graduate Student*, Stanford University; Dr. Roger D. Kornberg, advisor  
5/93 – 8/94      *Summer research assistant*, Los Alamos National Lab; Dr. Mark Bitenski,  
advisor  
5/92 – 8/92      *Research assistant*, Brigham Young Univ. Physics Dept; Dr. William  
Strong, advisor

### **Honors, Awards, and Board Memberships**

Fellow, American Academy of Microbiology, February, 2024  
Recipient, Izatt-Christensen Faculty Excellence in Research, March 2023  
Member, Scientific Advisory Board Duke Center for HIV Structural Biology, 2022 – 2023  
Member, Scientific Advisory Board Oregon Health and Science University National  
Center for Cryo-EM, 2018 – present  
Member, Quintennial Review Committee for Medical Research Council (MRC) Laboratory of  
Molecular Biology (LMB) 2021, 2015  
Nominated for the National Academy of Sciences Award for Scientific Reviewing, 2018  
Nominated for Caltech's Richard P. Feynman Prize for Excellence in Teaching, 2018, 2017,  
2016, 2015  
Member, Frederick National Laboratory Center for Cryo-EM Advisory Committee, 2016 –

2024

Ad-hoc participant, Biomedical Technology Research Resource Assessment Panel, National Institute of Health, Bethesda, MD, December 1 – 2, 2015  
Member, Purdue Structural Biology External Review Panel, 2014  
Member, Advisory Board, NIH Center for Macromolecular Modeling and Bioinformatics, 2014  
Member, Scientific Advisory Board, Boulder Laboratory for 3-D Electron Microscopy of Cells, a National Center for Research Resources, 2010 - 2014  
Member, Defense Science Study Group, 2010 - 2011  
Chair, Division of Cell and Structural Biology, American Society of Microbiology, 2010  
Member, Faculty of 1000, Structural Biology, Macromolecular Machines Section, 2008-2009  
Executive Committee of the Center for the Structural Biology of Cellular Host Elements in Egress, Trafficking, and Assembly of HIV (CHEETAH), 2007 - 2022  
Searle Scholar, 2004 - 2006  
Damon Runyon-Walter Winchell post-doctoral fellow, 1999-2002  
Microscopy Society of America Presidential Scholar, 1998  
Valedictorian, College of Physical and Mathematical Sciences, Brigham Young University, 1994

### **Scientific and Administrative Leadership**

Dean, College of Physical and Mathematical Sciences, Brigham Young University, 2020 – present:

Leader of 7 departments comprising 200 faculty, 50 staff, 3000 students, and 20,000 alumni. Presides over all aspects of college including budgets, space allocations, recruiting and termination, curriculum, teaching, research, and many college events annually, including a college session of the Annual University Conference (250 college employees), various alumni meetings, monthly College Councils (~25 people), Christmas luncheon (~300 people), Dean's firesides (~100 students) twice per year, Student Research Conference (650+ student presentations in 50 concurrent sessions), Strategic Resource Planning Presentations (by each of 7 departments plus the college presentation to the AVP and Pres. Councils), and two Convocations (~1500 people each).

Chair, CryoSECOM Development Committee, 2018 - 2022  
Director, Caltech CryoEM Facility, 2017 - 2022  
Organizer, 4<sup>th</sup> Annual Southern California Cryo-Electron Microscopy Symposium, Caltech, 2019  
Co-Organizer, Ken Downing Symposium, Berkeley, CA, 2014  
Organizer, World Congress on Electron Tomography, Cancun, Mexico, 2014  
Supervisor, Biology Division Alles EM facility, Jul. 2004 – 2008  
Organizer, Caltech Biology Division Annual Retreat, Redondo Beach, CA, Oct. 21-23, 2005

### **Publications**

\* These authors contributed equally to this work

+ Denotes co-corresponding authors

*In review or being revised for resubmission without previous posting on bioRxiv*

Milek, S., Maggi, S., Ashen, K., Ferrell, M. J., Hasanovic, A., Holgerson, A., Kannaiah, S., Singh, M., Ghosal, D., Jensen, G. J., and Vogel, J. P. (2024) Membrane association and polar localization of the Legionella pneumophila T4SS DotO ATPase mediated by quasi-redundant receptors. PNAS Central.

2023

205. Shepherd, D. C., Kaplan, M., Vankadari, N., Kim, K. W., Larson, C. L., Dutka, P., Beare, P. A., Krzymowski, E., Heinzen, R. A., **Jensen, G. J.**, and Ghosal, D. (2023). Morphological remodeling of *Coxiella burnetii* during its biphasic developmental cycle revealed by cryo-electron tomography. *iScience* 26(7): 107210. PMC: 37485371. PMID: PMC10362272
204. Kaplan, M., Chang, Y.-W., Oikonomou, C., Nicolas, W. J., Jewett, A. I., Kreida, S., Dutka, P., Rettberg, L. A., Maggi, S., and **Jensen, G. J.** (2023). Bdellovibrio predation cycle characterized at nanometre-scale resolution with cryo-electron tomography. *Nat Microbiol* 8(7): 1267 – 1279. PMID: 37349588
203. Dutka, P., Liu, Y., Maggi, S., Ghosal, D., Wang, J., Carter, S. D., Zhao, W., Vijayrajratnam, S., Vogel, J. P., and **Jensen, G. J.** (2023). Structure and function of the Dot/lcm T4SS. *bioRxiv*: doi.org/10.1101/2023.03.22.533729
202. Kreida, S., Narita, A., Johnson, M. D., Tocheva, E. I., Das, A., Ghosal, D., and **Jensen, G. J.** (2023). Cryo-EM structure of the *Agrobacterium tumefaciens* T4SS-associated T-pilus reveals stoichiometric protein-phospholipid assembly. *Structure* S0969-2126(23)00039-4. PMID: 36870333. PMID: PMC10168017

2022

201. Boltje, D. B., Hoogenboom, J. P., Jakobi, A. J., **Jensen, G. J.**, Jonker, C. T. H., Kaag, M. J., Koster, A. J., Last, M. G. F., de Agrela Pinto, C., Plitzo, J. M., Raunser, S., Tacke, S., Wang, Z., van der Wee, E. B., Wepf, R., and den Hoedt, S. (2022). A cryogenic, coincident fluorescence, electron, and ion beam microscope. *Elife* 11:e82891. PMID: 36305590. PMID: PMC9714966
200. Metskas, L. A., Wilfong, R., and **Jensen, G. J.** (2022). Subtomogram averaging for biophysical analysis and supramolecular contact. *J Struct Biol X* 6: 100076. PMID: 36311290. PMID: PMC9596874
199. Kreida, S.\*, Johnson, N. M.\*, Tocheva, E. I., Das, A., Ghosal, D., and **Jensen, G. J.** (2022). Cryo-EM structure of *Agrobacterium tumefaciens* type IV secretion system-associated T-pilus reveals stoichiometric protein-phospholipid assembly. *bioRxiv*: doi.org/10.1101/2022.09.25.509369
198. Kaplan, M., Shepherd, D. C., Vankadari, N., Kim, K. W., Larson, C. L., Dutka, P., Beare, P. A., Krzymowski, E., Heinzen, R. A., **Jensen, G. J.**, and Ghosal, D. (2022). Structural remodeling of *Coxiella burnetii* during its biphasic developmental cycle revealed by cryo-electron tomography. *bioRxiv*: doi.org/10.1101/2022.08.23.505044

197. Metskas, L. A., Ortega, D., Oltrogge, L., Blikstad, C., Lovejoy, D. R., Laughlin, T. G., Savage, D. F., and **Jensen, G. J.** (2022). Rubisco forms a lattice inside alpha-carboxysomes. *Nat Commun* 13(1): 4863. PMID: 35982043. PMCID: PMC9388693
196. Pakharukova, N., Malmi, H., Tuittila, M., Dahlberg, T., Ghosal, D., Chang, Y-W., Myint, S. L., Paavilainen, S., Knight, S. D., Lamminmaki, U., Uhlin, B. E., Andersson, M., **Jensen, G. J.**, and Zavialov, A. V. (2022). Archaic chaperone-usher pili self-secrete into superelastic zigzag springs. *Nature* 609(7926): 335 – 340. PMID: 35853476. PMCID: PMC9452303
195. Kaplan, M., Oikomou, C. M., Wood, C. R., Chreifi, G., Ghosal, D., Dobro, M. J., Yao, Q., Pal, R. R., Baidya, A., Liu, Y., Maggi, S., McDowall, A. W., Ben-Yehuda, S., Rosenshine, I., Briegel, A., Beeby, M., Chang, Y-W., Shaffer, C. L., and **Jensen, G. J.** (2022). Discovery of a novel inner membrane-associated bacterial structure related to the flagellar type III secretion system. *J Bacteriol* 204(8): e0014422. PMID: 35862756. PMCID: PMC9380563
194. Salahshoor, H.\*, Yao, Y.\*, Dutka, P.\*, Nystrom, N. N., Jin, Z., Min, E., Malounda, D., **Jensen, G. J.**, Ortiz, M., and Shapiro, M. G. (2022). Geometric effects in gas vesicle buckling under ultrasound. *Biophys J.* 121(21): 4221 – 4228. PMID: 36081347. PMCID: 9674984
193. Dutka, P., Metskas, L. A., Hurt, R. C., Salahshoor, H., Wang, T-Y., Malounda, D., Lu, G., Chou, T-F., Shapiro, M. G., and **Jensen, G. J.** (2022). Structure of *Anabaena flos-aquae* gas vesicles revealed by cryo-ET. *bioRxiv: doi.org/10.1.101/2022.06.21.496981*
192. Kaplan, M., Chang, Y-W., Oikonomou, C. M., Nicolas, W. J., Jewett, A. I., Kreida, S., Dutka, P., Rettberg, L. A., Maggi, S., and **Jensen, G. J.** (2022). Dynamic structural adaptations enable the endobiotic predation of *bdellovibrio bacteriovorus*. *bioRxiv: doi.org/10.1.1101/2022.06.13.496000*
191. Nicolas, W. J., Fäßler, F., Dutka, P., Schur, F. K., **Jensen, G. J.**, and Meyerowitz, E. (2022). Cryo-electron tomography of the onion cell wall shows bimodally oriented cellulose fibers and reticulated homogalacturonan networks. *Curr Biol* S0960-9822(22): 00593. PMID: 35508170. PMCID: PMC9240970
190. Peck, A., Carter, S. D., Mai, H., Chen, S., Burt, A., and **Jensen, G. J.** (2022). Montage electron tomography of vitrified specimens. *J Struct Biol* 214(2): 107860. PMID: 35487464. PMCID: PMC10081539
189. Kaplan, M., Oikonomou, C. M., Wood, C. R., Chreifi, G., Subramanian, P., Ortega, D. R., Chang, Y.-W., Beeby, M., Shaffer, C. L., and **Jensen, G. J.** (2022). Novel transient cytoplasmic rings stabilize assembling bacterial flagellar motors. *EMBO J* 41(10): e109523. PMID:35301732. PMCID: PMC9108667
188. Zhao, W., and **Jensen, G. J.** (2022). *In situ* architecture of human kinetochore-microtubule interface visualized by cryo-electron tomography. *bioRxiv: doi.org/10.1101/2022.02.17.480955*

187. Depelteau, J. S., Renault, L., Althof, N., Cassidy, C. K., Mendonça, L. M., **Jensen, G. J.**, Resch, G. P., and Briegel, A. (2022). UVC inactivation of pathogenic samples suitable for cryo-EM analysis. *Commun Biol* 5(1): 29. PMID: 35017666. PMCID: PMC8752862

2021

186. Mageswaran, S. K.\* , Grotjahn, D. A.\*+, Zeng, X., Barad, B. A., Medina, M., Hoang, M. H., Dobro, M. J., Chang, Y-W., Xu, M., Yang, W. Y., and **Jensen, G. J.+** (2021). Nanoscale details of mitochondrial fission revealed by cryo-electron tomography. *bioRxiv: doi.org/10.1101.2021.12.13.472487*
185. Phillips, D. A.\* , Zacharoff, L. A.\* , Hampton, C. M., Chong, G. W., Malanoski, A. P., Metskas, L. A., Xu, S., Bird, L. J., Eddie, B. J., Miklos, A. E., **Jensen, G. J.**, Drummy, L. F., El-Naggar, M. Y., Glaven, S. M. (2021). A bacterial membrane sculpting protein with BAR domain-like activity. *Elife* 10: e60049. PMID: 34643180. PMCID: PMC8687657
184. Oikonomou, C. M., and **Jensen, G. J.** (2021). *The Atlas of Bacterial & Archaeal Cell Structure: an Interactive Open-Access Microbiology Textbook. J Microbiol Biol Edu* 22(2): e00128-21. PMID: 34594449. PMCID: PMC8442016
183. Kaplan, M., Chreifi, G., Metskas, L. A., Liedtke, J., Wood, C. R., Oikonomou, C. M., Nicolas, W. J., Subramanian, P., Zacharoff, L. A., Wang, Y., Chang, Y-W., Beeby, M., Dobro, M., Zhu, Y., McBride, M. J., Briegel, A., Shaffer, C., and **Jensen, G. J.** (2021) *In situ* imaging of bacterial membrane of projections and associated protein complexes using electron cryo-tomography. *Elife* 10:e73099. PMID: 34468314. PMCID: PMC8455137
182. Kaplan, M., Tocheva, E. I., Briegel, A., Dobro, M. J., Chang, Y-W., Subramanian, P., McDowall, A. W., Beeby, M., and **Jensen, G. J.** (2021). Loss of the bacterial flagellar motor switch complex upon cell lysis. *mBio* e0029821. PMID: 34098733. PMCID: PMC8263016
181. Vulovic, I., Yao, Q.\* , Park, Y-J.\* , Courbet, A., Norris, A., Busch, F., Sahasrabudde, A., Merten, H., Sahtoe, D. D., Ueda, G., Fallas, J. A., Weaver, S. J., Hsia, Y., Langan, R. A., Pluckthun, A., Wysocki, V. H., Veessler, D., **Jensen, G. J.**, and Baker, D. (2021). Generation of ordered protein assemblies using rigid three-body fusion. *Proc Natl Acad Sci USA* 118(23): e2015037118. PMID: 34074752. PMCID: PMC8201882
180. Peck, A.+ , Yao, Q., Brewster, A. S., Zwart, P. H., Heumann, J. M., Sauter, N. K., and **Jensen, G. J.+** (2021). Challenges in solving structures from radiation-damaged tomograms of protein nanocrystals assessed by simulation. *Acta Crystallogr D Struct Biol* 77(5): 572 – 586. PMID: 33950014. PMCID: PMC8098477
179. Kaplan, M., Wang, Y., Chreifi, G., Zhang, L., Chang, Y.-W., and **Jensen, G. J.** (2021). Programmed flagellar ejection in *Caulobacter crescentus* leaves PL-subcomplexes. *J Mol Biol* 167004. PMID: 33891903. PMCID: PMC9843737
178. Mageswaran, S. K., Yang, W. Y.+ , Chakrabarty, Y., Oikonomou, C. M. and **Jensen, G. J.+** (2021). A cryo-electron tomography workflow reveals protrusion-mediated shedding on injured plasma membrane. *Sci Adv* 7(13): eabc6345. PMID: 33771860. PMCID: PMC7997517

177. Chreifi, G., Chen, S., and **Jensen, G. J.** (2021). Rapid tilt-series method for cryo-electron tomography: Characterizing stage behavior during FISE acquisition. *J Struct Biol* 213(2): 107716. PMID: 33713788. PMCID: PMC8217199
176. Dutka, P., Malounda, D., Metskas, L. A., Chen, S., Hurt, R. C., Lu, G. J., **Jensen, G. J.**, and Shapiro, M. G. (2021). Measuring gas vesicle dimensions by electron microscopy. *Protein Sci* 30(5): 1081 – 1086. PMID: 33641210. PMCID: PMC8040859
175. Carter, S. D.\*, Tran, N.-T.\*, Mazière, A. D., Ashkenazi, A., Klumperman, J., **Jensen, G. J.**, and Walter, P. (2021). The stress-sensing domain of activated IRE1  $\alpha$  forms helical filaments in narrow ER membrane tubes. *Science* 374(6563): 52 – 57. PMID: 34591618. PMCID: PMC9041316
174. Jewett, A. I.+ , Stelter, D., Lambert, J., Saladi, S. M., Roscioni, O. M., Ricci, M., Autin, L., Maritan, M., Bashusqeh, S. M., Keyes, T., Dame, R. T., Shae, J.-E., **Jensen, G. J.**, and Goodsell, D. S.+ (2021). Moltemplate: A tool for coarse-grained modeling of complex biological matter and soft condensed matter physics. *J Mol Biol* 422(11): 166841. PMID: 33539886. PMCID: PMC8119336
173. Nguyen, L. T., Oikonomou, C. M., and Jensen, G. J. (2021). Simulations of proposed mechanisms of FtsZ-driven cell construction. *J Bacteriol* 203(3): e00576-20. PMID: 33199285. PMCID: PMC7811198
172. Nicolas, W. J., Ghosal, D., Tocheva, E. I., Meyerowitz, E. M., and **Jensen, G. J.** (2021). Structure of the bacterial cellulose ribbon and its assembly-guiding cytoskeleton by electron cryotomography. *J Bacteriol* 203(3): e00371-20. PMID: 33199282. PMCID: PMC7811197

2020

171. Kaplan, M., Nicolas, W. J., Zhao, W., Carter, S. D., Metskas, L. A., Chreifi, G., Ghosal, D., and **Jensen, G. J.** (2020). *In situ* imaging and structure determination of biomolecular complexes using cryo-electron tomography. *Methods Mol Biol* 2215: 81 – 111. PMID: 33368000.
170. Zhang, X., Carter, S. D., Singla, J., White, K. L., Butler, P. C., Stevens, R. C., and **Jensen, G. J.** (2020). Visualizing insulin vesicle neighborhoods in  $\beta$  cells by cryo-electron tomography. *Sci Adv* 6(50): eabc8258. PMID: 33298442. PMCID: PMC7725471
169. Carter, S. D., Marmede, J. I., Hope, T. J., and **Jensen, G. J.** (2020). Correlated cryogenic fluorescence microscopy and electron cryo-tomography shows that exogenous TRIM5a can form hexagonal lattices or autophagy aggregates *in vivo*. *Proc Natl Acad Sci USA*: 117(47): 29702 – 29711. PMID: 33154161. PMCID: PMC7703684
168. Weaver, S. J., Ortega, D. R., Sazinsky, M. H., Dalia, T. N., Dalia, A. B., and **Jensen, G. J.** (2020). CryoEM structure of the type Iva pilus secretin required for natural competence in *Vibrio cholerae*. *Nat Commun* 11(1): 5080. PMID: 33033258. PMCID: PMC7545093
167. Treuner-Lange, A., Chang, Y.-W., Glatter, T., Herfurth, M., Lindow, S., Chreifi, G., **Jensen, G. J.**, and Sogaard-Anderson, L. (2020). PilY1 and minor pilins form a complex priming

the type Iva pilus in *Myxococcus xanthus*. *Nat Commun* 11(1): 5054. PMID: 33028835. PMCID: PMC7541494

166. Garcez, A. S.\*+, Kaplan, M.\* , **Jensen, G. J.**, Scheidt, F. R., Oliveira, E. M., and Suzuki, S. S. (2020). Effects of antimicrobial photodynamic therapy on antibiotic-resistant *Escherichia coli*. *Photodiagnosis Photodyn Ther* 102029. PMID: 32980553. PMCID: PMC7744317
165. Gorasia, D. G.\* , Chreifi, G.\* , Seers, C. A., Butler, C. A., Heath, J. E., Glew, M. D., McBride, M. J., Subramanian, P., Kjaer, A., **Jensen, G. J.+**, Veith, P.D.+ , and Reynolds, E. C.+ (2020). *In situ* structure and organization of the type IX secretion system. *bioRxiv*: doi: <https://doi.org/10.1101/2020.05.13.094771>
164. Ortega, D. R., Yang, W., Subramanian, P., Mann, P., Kjaer, A., Chen, S., Watts, K. J., Pirkadian, A., Collins, D. A., Kooger, R., Kalyuzhnaya, M. G., Ringgaard, S., Briegel, A+, and **Jensen, G. J.+** (2020). Repurposing a chemosensory macromolecular machine. *Nat Commun* 11: 2041. PMID: 32341341. PMCID: PMC7184735
163. Kaplan, M., Sweredoski, M. J., Rodrigues, J. P. G. L. M., Tocheva, E. I., Chang, Y-W., Ortega, D. R., Beeby, M., and **Jensen, G. J.** (2020). Bacterial flagellar motor PL-ring disassembly subcomplexes are widespread and ancient. *Proc Natl Acad Sci USA* 117(16): 8941 – 8947. PMID: 32241888. PMCID: PMC7183148
162. Carter, S. D.\* , Hampton, C. M.\* , Langlois, R.\* , Melero, R., Farino, Z. J., Calderon, M. J., Li, W., Wallace, C. T., Tran, N. H., Grassucci, R. A., Siegmund, S., Pemberton, J., Morgenstern, T. J., Eisenman, L., Aguilar, J. I., Greenberg, N. L., Levy, E. S., Yi, E., Mitchell, W. G., Rice, W. J., Wigge, C., Pilli, J., George, E. W., Aslanoglou, D., Courel, M., Freyberg, R. J., Javitch, J. A., Wills, Z. P., Area-Gomez, E., Shiva, S., Bartolini, F., Volchuk, A., Murray, S. A., Aridor, M., Fish, K. N., Walter, P., Balla, T., Fass, D., Wolf, S. G., Watkins, S. C., Carazo, J. M., **Jensen, G. J.+**, Frank, J.+ , and Freyberg, Z+. (2020). Ribosome-associated vesicles: a dynamic vesicular endoplasmic reticulum in secretory cells. *Sci Adv* 6(14): eaay9572. PMID: 32270040. PMCID: PMC7112762
161. Phillips, D. A.\* , Zacharoff, L. A.\* , Hampton, C. M., Chong, G. W., Malanoski, A., Metskas, L. A., Xu, S., Bird, L. J., Eddie, B. J., **Jensen, G. J.**, Drummy, L. F., El-Naggar, M. Y., and Glaven, S. M. (2019). A prokaryotic membrane sculpting BAR domain protein. *eLife* 2021 10:e60049. PMCID: PMC8687657

2019

160. Ghosal, D., Kim, K. W., Zheng, H., Kaplan, M., Vogel, J. P., Cianciotto, N. P., and **Jensen, G. J.** (2019). *In vivo* structure of the Legionella type II secretion system by electron cryotomography. *Nat Microbiol* 4(12): 2101 – 2108. PMID: 31754273. PMCID: PMC6879910
159. Auer, G. K., Oliver, P. M., Rajendram, M., Lin, T. Y., Yao, Q., **Jensen, G. J.**, and Weibel, D. B. (2019). Bacterial swarming reduces *Proteus mirabilis* and *Vibrio parahaemolyticus* cell stiffness and increases  $\beta$ -lactam susceptibility. *mBio* 10(5): e00210 – 19. PMID: 31594808. PMCID: PMC6786863

158. O'Neal, L.\* , Gullett, J. M.\* , Aksenova, A., Hubler, A., Briegel, A., Ortega, D. R., Kjaer, A., **Jensen, G. J.**, and Alexandre, G. (2019). Distinct chemotaxis protein paralogs assemble into chemoreceptor signaling arrays to coordinate signaling output. *MBio* 10(5): e01757 – 19. PMID: 31551333. PMCID: PMC6759762
157. Martynowycz, M. W., Zhao, W., Hattne, J., **Jensen, G. J.**, and Gonen, T. (2019). Qualitative analyses of polishing and precoating FIB milled crystals for MicroED. *Structure* 27(9): 1594 – 1600.e2. PMID: 31422911. PMCID: PMC7145226
156. Ortega, D. R., and **Jensen, G. J.** (2019). Regular architecture (RegArch): A standard expression language for describing protein architectures. *bioRxiv*: doi:<https://doi.org/10.1101/679910>. Under revision between submissions
155. Kaplan, M., Subramanian, P., Ghosal, D., Oikonomou, C. M., Pirbadian, S., Starwalt-Lee, R., Mageswaran, S. K., Ortega, D. R., Gralnick, J. A., El-Naggar, M. Y., and **Jensen, G. J.** (2019). *In situ* imaging of the bacterial flagellar motor disassembly and assembly processes. *EMBO J* 38(14): e100957. PMID: 31304634. PMCID: PMC6627242
154. Yao, Q.\* , Weaver, S. J.\* , Mock, J. Y., and **Jensen, G. J.** (2019). Fusion of DARPin to aldolase enables visualization of small protein by Cryo-EM. *Structure* 27(7): 1148 – 1155.e3. PMID: 31080120. PMCID: PMC6610650
153. Ghosal, D.\* , Jeong, K. C.\* , Chang, Y-W., Gyore, J., Teng, L., Gardner, A., Vogel, J. P.+ , and **Jensen, G. J.+** (2019). Molecular architecture, polar targeting and biogenesis of the Legionella Dot/Icm T4SS. *Nat Microbiol* 4(7): 1173 - 1182. PMID: 31011165. PMCID: PMC6588468
152. Ortega, D. R., Oikonomou, C. M., Ding, H. J., Rees-Lee, P., Alexandria, and **Jensen, G. J.** (2019). ETDB-Caltech: A blockchain based distributed public database for electron tomography. *PLoS One* 14(4): e0215531. PMID: 30986271. PMCID: PMC6464211 **\*Won Top 2018 Blockchain Papers at the Blockchain Connect Conference, San Francisco, CA**
151. Oikonomou, C. M., and **Jensen, G. J.** (2019). Electron cryotomography of bacterial secretion systems. *Microbiol Spectr* 7(2): Doi:10.1128/microbiolspec.PSIB-0019-2018. PMID: 30953431. PMCID: PMC6452891
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### **Textbook Contributions**

Figure of *Ostreococcus tauri*, visualized by cryo-EM (A). Fig 2a from Gregory P. Henderson, Lu Gan, and Grant J. Jensen. 3-D ultrastructure of *O. tauri*. PLOS One. 2007: 2(8): E749. 2007 August 15.

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published in *Microbiology: An Evolving Science* by Joan L. Slonczewski

Figure of electron tomograph of a bacterial flagellar motor in Brock Biology of Microorganisms Edition 15 by Michael T. Madigan; Kelly S. Bender; Daniel H. Buckley; W. Matthew Sattley; and David A. Stahl. Pearson Education Inc. 2016

Figure of segmented *Halothiobacillus neopolitamus* used as cover of Cell Biology of Bacteria by Shapiro and Losick, taken from chapter "Cell biology of prokaryotic organelles." Cold Spring Harbor Perspect. Biol. Doi:10.1101/cshperspect.a000422

Figure of yeast division septum in *Cell Biology 4<sup>th</sup> Edition* by Thomas Pollard et al. 2022

Image of *archaeon Nmar* in Brock Biology of Microorganisms

Figure of *Ostreococcus tauri* cell in Microbiology by Slonczewski and Foster, second edition, taken from paper "Electron cryotomography of an entire eukaryotic cell" PLoS One (2007). 2(8):e749

Graph showing effects of alignment errors in Three-dimensional electron microscopy by Joachim Frank, second edition, taken from paper "Alignment error envelopes for single particle analysis." JSB 133:143

Figure of *Mycoplasma pneumoniae* cell supplied for Genes IX by Benjamin Lewin

Image of *Mycoplasma pneumoniae* cell supplied for Lewin's Genes X by Jocelyn Krebs, Elliot Goldstein, and Stephen Kilpatrick

Images of *Mycoplasma genitalium* supplied for article in Discover Magazine, Jun. 2007

Reconstruction and model of *E. coli* pyruvate dehydrogenase supplied for Microbiology: An Evolving Science by Joan Slonczewski

Figure of inner curvature ribbon bundle supplied for Cell Structure, Organization, Bacteria and Archaea by Elsevier Publishing

Figure of *Caulobacter* cytoskeleton in Cells edited by Benjamin Lewis

Images highlighting “Type VI secretion requires a dynamic contractile phage tail-like structure”  
in Microbiology: third edition