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(2023)

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EDUCATION

1982-1986 Postdoctoral Fellow, Harvard University, Cambridge, MA.
1982 Ph.D., Molecular Biophysics and Biochemistry,
Yale University, New Haven, CT.
1976 B.A., Biochemistry, Smith College, Northampton, MA.

APPOINTMENTS

2022- Distinguished Professor
1997- Professor
Department of Biochemistry and Molecular Biology
University of Massachusetts, Amherst, MA.
1993-1997 Associate Professor, Biology Department,
Yale University, New Haven, CT.
1987-1993 Assistant Professor, Biology Department,
Yale University, New Haven, CT.

AWARDS AND HONORS

2020 Fellow of the American Association for the Advancement of Science
2020 American Society of Plant Biologists Lawrence Bogorad Award for Excellence
in Plant Biology Research
2018 Samuel F. Conti Faculty Fellowship Award, University of Massachusetts,
Amherst [Highest University recognition of research excellence]
2014 Distinguished Faculty Lecturer and Recipient of Chancellor's Medal, University
of Mass, Amherst [A public lecture series celebrates excellence; the
Chancellor's Medal bestows the highest honor to faculty]
2012 Outstanding Research Award
College of Natural Sciences (CNS), University of Massachusetts, Amherst
2012, 2020 Mutual Mentoring Award, Senior faculty member
2010 Research Leadership in Action Award, University of Massachusetts, Amherst.
[An award that recognizes efforts to foster national and international liaisons]
2010 American Society of Plant Biologists Fellows Award
1991 Yale University Junior Faculty Fellowship
1982-1986 Rockefeller Foundation Postdoctoral Fellowship and Research Award

SOCIETY MEMBERSHIP

- American Society of Plant Biologists
- American Association for the Advancement of Science
- International Society of Sexual Plant Reproduction Research

PUBLICATIONS

105. Huang J, Yang L, Zhang L, Zhao Y, Yang L, Wu X, Hui J, Cui X, Yang H, Liu S, Xu Q, Pang M, Cao Y, Xu G, Chen Y, Ren X, Lv J, Yu J, Ding J, Wang N, Wei X, Lin Q, Yuan Y, Zhang X, Ma C, Cheng, Dai C, Wang P, Wang Y, Cheng F, Zeng W, Palanivelu R, Wu H-M, Zhang X, **Cheung AY (co-corresponding)**, Duan Q. (2023) Stigma receptors control intra- and interspecies barriers in Brassicaceae. *Nature* 614, 303-308.
104. Liu H, Huang J, Zhang X, Liu G, Liang W, Zhu G, Dong M, Li M, Zhang J, Yang W, Xiao W, **Cheung AY**, Tao L-Z. (2023) The rice RAC/ROP GTPase Activator OsRopGEF10 functions in crown root development by regulating cytokinin signaling. *The Plant Cell* 35, 453-468.
103. Noble JA, Bielski NV, Liu, M-C J, DeFalco TA, Stegmann M, Nelson ADL, McNamara K, Sullivan S, Dinh KK, Khuu N, Hancock S, Shiu S-H, Zipfel C, **Cheung AY**, Beilstein MA, Palanivelu R. (2022). Evolutionary analysis of the LORELEI gene family in plants reveals regulatory subfunctionalization. *Plant Physiol* 190, 2539-2556.
102. **Cheung AY**, Duan Q-h, Li C, Liu M-D J, Wu H-M. 2022. Pollen-pistil interactions: it takes two to tangle but a molecular cast of many to deliver. *Curr Opin. Plant Biol.* 10.1016/j.pbi.2022.102279.
101. Zhong S, Li L, Wang Z, Ge Z, Li Q, Bleckmann A, Wang J, Song, Z, Shi Y, Liu T, Li L, Zhou H, Wang Y, Zhang L, Wu H-M, Lai L, Gu H, Dong J, **Cheung AY**, Dresselhaus T, Qu L-j. (2022) RALF peptide signaling controls the polytubey block in Arabidopsis. *Science* 375, 290-296.
100. **Cheung AY**, Cosgrove D, Hara-Nishimura I, Jurgens G, Llyod C, Robinson DG, Staehelin LA, Weijers D. (2022) A rich and bountiful harvest – Key discoveries in Plant Cell Biology. *Plant Cell* (An invited collective article on plant cell biology breakthroughs in the past decades for a focus issue on Plant Cell Biology) <https://doi.org/10.1093/plcell/koab234> (Advance publication)
99. Yang H, Wang D, Guo L, Pan H, Yvon R, Garman S, Wu H-M, **Cheung AY**. (2021) Malectin/Malectin-domain-containing proteins: A repertoire of cell surface molecules with broad functional potential. *The Cell Surface* 7. <https://doi.org/10.1016/j.tcs.2021.100056>
98. Zhang L, Huang J, Su S, Wei X, Yang, L, Zhao H, Yu J Wang J, Hui J, Hao, S, Song S, Cao Y, Wang M, Zhang X, Zhao Y, Wang Z, Zeng W, Wu H-M*, Yuan Y, **Cheung AY**, Duan Q. 2021. FERONIA-regulated reactive oxygen species mediate self-incompatibility in Brassica rapa. *Current Biology* (May 18, 2021); doi: 10.1016/j.cub.2021.04.060. [A product of continued mentoring of former postdoc QH Duan on a project initiated in my lab]
97. Liu C, Shen L, Xiao Y, Vyshedsky D*, Peng C, Sun X, Liu Z, Cheng L, Zhang H, Han Z, Chai J, Wu H-M*, **Cheung AY**, Li C. 2021. Pollen PCP-B peptides unlock a stigma peptide-receptor kinase gated mechanism for pollination. *Science* 372, 171-175. doi: 10.1126/science.abc6107. PubMed PMID: 33833120. [A product of continued mentoring of former postdoc Chao Li on a project initiated in my lab]
96. Wang J, Guo X, Xiao Q, Zhu J, **Cheung AY**, Yuan L, Vierling E, Xu S. (2020) Auxin efflux controls orderly nucellar degeneration and expansion of the female gametophyte in Arabidopsis. *New Phytol* 230, 2261-2274. <https://doi.org/10.1111/nph.17152>
95. Huang J, Su S, Dai H, Liu C, Wei X, Zhao Y, Wang Z, Zhang X, Yuan Y, Yu X, Zhang C, Li Y, Zeng W, Wu H-M*, **Cheung AY**, Wang S, Duan Q. (2020) Senescence breaks down self-incompatibility by causing programmed cell death in stigmatic papilla cells in Chinese cabbage and radish. *Front Plant Sci* <https://doi.org/10.3389/fpls.2020.586901> [A product of continued mentoring of former postdoc QH Duan on a project initiated in my lab]
94. Noble JA, Liu M-C J*, DeFalco TA, Stegmann M, McNamara K*, Sullivan B*, Dinh KK*, Khuu

- N*, Hancock S, Shiu S-H, Zipfel C, Beilstein MA, **Cheung AY**, Palanivelu R. (2020) Conserved Molecular function and regulatory subfunctionalization of the LORELEI gene family in Brassicaceae. bioRxiv doi: <https://doi.org/10.1101/2020.04.27.062893>.
93. Duan Q-h[#], Liu M-C J[#], Kita, D, Jordan S, Yeh F-L J, Yvon R, Carpenter H, Federico AN, *Garcia Valencia L*, Eyles SJ, Wang C-s, Wu H-M, **Cheung AY**. (2020) FERONA controls pectin- and nitric oxide-mediated male-female interaction. *Nature*, 579, 561-566. [#]co-first authors.
 92. Zhao P, Zhou X-m, Zhao L-l, **Cheung AY**, Sun M-X. (2020) Autophagy-mediated compartmental cytoplasmic deletion is essential for tobacco pollen germination and male fertility. January 30, 2020, *Autophagy*, doi: 10.1080/15548627.2020.1719722
 91. Cheung AY. (2019) To live, or not to live, that is the question. *Current Biology*, 29, R1174-R1178 (A Commentary).
 90. Ge Z, Zhao Y, Liu M-C*, Wang L, Zhong S, Hou S, Jian J, Liu T, Huang Q, Xiao J, Gu H, Wu H-M*, Dong J, Dresselhaus T, **Cheung AY**, Qu L-J. (2019) LLG2/3 are co-receptors in BUPS/ANX-RALF signaling to regulate Arabidopsis pollen tube integrity. *Current Biology* 29, 3256-3265.
 89. Soares A*, Niedermaier S, Faro R, Loos A, Manadas B, Faro C, Huesgen P, **Cheung AY**, Simoes I. (2019) An atypical aspartic protease modulates lateral root development in Arabidopsis thaliana. *J. Exp. Bot.* 70, 2157-2171.
 88. Ge Z, **Cheung AY**, Qu L-J. (2019) Pollen tube integrity regulation in flowering plants: insights from molecular assemblies on the pollen tube surface. *New Phytologist* 222, 687-693.
 87. Duan Q-h, **Cheung AY**. 2018. Context-specific dependence on FERONIA kinase activity. *FEBS Lett* 592: 2392-2394. [A Commentary]
 86. Feng W, Kita D*, Peaucelle A, Doan V*, Duan Q-h*, Liu M-C*, Maman J*, Yvon R*, Steinhorst L, Schmitz-Thom I, Cartwright HN, Kudla J, Wu H-M*, **Cheung AY** (co-corresponding), Dinneny JD. (2018) The FERONIA receptor kinase maintains cell wall integrity during salt stress through Ca²⁺ signaling. *Current Biology* 28, 666-675.
 85. Ge Z[#], Bergonci T[#]*, Zhao Y, Zou Y*, Du S, Liu M-C*, Luo X, Ruan H, García-Valencia LE*, Zhong S, Hou S, Huang Q, Lai L, Moura DS, Gu H, Dong J, Wu H-M*, Dresselhaus T, Xiao J, **Cheung AY** (co-corresponding), Qu L-J. (2017) Arabidopsis pollen tube integrity and sperm release are regulated by RALF-mediated signaling. *Science* 358, 1596-1600. [#]Co-first authors.
 84. Garcia-Valencia LE*, Bravo-Alberto CE, Wu H-M*, Rodriguez-Sotres R, **Cheung AY**, Cruz-Garcia F. (2017) SIPP, a novel mitochondrial phosphate carrier mediates self-incompatibility. *Plant Physiol.* 175, 1105-1120. doi:10.1104/pp.16.01884
 83. Liu Y, Dong Q, Kita D*, Liu G, Wu X, Zhu X, **Cheung AY**, Wu H-M*, Tao L-z. (2017) RopGEF1 plays a critical role in polar auxin transport in early development. *Plant Physiol.* 175, 157-171. Doi:10.1104/pp.17.00697.
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 81. Li C, Wu H-M, **Cheung AY**. (2016) FERONIA and her pals: functions and mechanisms. *Plant Physiol* 171, 2379-2391 [A Review]
 80. **Cheung AY**, Wu, H-M. (2016) LURE is bait for multiple receptors. *Nature* 531, 178-180. [A News and Views]
 79. **Cheung AY**, Wu H-M. (2015) SERKs: Putting plant mouths in their right place. *Curr. Biol.* 25, R827-844. [A Commentary]
 78. Li C, Yeh FL, **Cheung AY** (co-corresponding), Duan Q-h, Kita D, Liu M-C, Maman J, Luu EJ, Wu BW, Gates L, Jalal M, Kwong A, Carpenter H, Wu H-M. (2015) Glycosylphosphatidylinositol-anchored proteins act as chaperones and co-receptors for FERONIA receptor kinase signaling in Arabidopsis. *eLife*, 4:e06587.
 77. Hernandez-Barrera A, Zepeda I, Sanchez F, Quinto C, Sanchez R, Wu H-M*, **Cheung A**. Cardenas, L. (2015) Hyper, a hydrogen peroxide sensor, depicts the sensitivity of the Arabidopsis root elongation zone to aluminum treatment. *Sensors* 15, 855-867.

76. **Cheung AY**, Li C, Zou Y, Wu H-M. (2014) Glycosylphosphatidylinositol anchoring: control through modification. *Plant Physiol.* 166, 748-750. [A Commentary]
75. Huang JB, Liu H, Chen M, Li X, Wang M, Yang Y, Wang C, Huang J, Liu G, Liu Y, Xu J, **Cheung AY**, Tao L-z. (2014) ROP3 GTPase contributes to polar auxin transport and auxin responses and is important for embryogenesis and seedling growth in Arabidopsis. *Plant Cell* 26, 3501-3518.
74. Duan Q[#], Kita D[#], Johnson EA, Aggarwal M, Gates L, Wu HM, **Cheung AY**. (2014) Reactive oxygen species mediate pollen tube rupture to release sperm for fertilization in Arabidopsis. *Nature Commun.* 5, 3129. [#]co-first authors
73. Wang H, Zhuang X, Cai Y, **Cheung AY**, Liwen J. (2013) Apical F-actin regulated exocytic targeting of NtPPME11 is essential for pollen tube cell wall construction and rigidity. *Plant J.* 76, 367-379.
72. Nibau C, Tao L-z, Lévasséur K, Wu H-M, **Cheung AY**. (2013) The Arabidopsis small GTPase AtRac7/ROP9 is a modulator of auxin and ABA signaling. *J. Exp. Bot.* 64, 3425-3437.
71. Hernandez A, Quinto C, Johnson EA*, Wu H-M*, **Cheung AY**, Cardenas L. (2013) Using Hyper as a molecular probe to visualize hydrogen peroxide in living plant cells: a method with virtually unlimited potential in plant biology. *Methods in Enzymology* 527, 275-290.
70. Chen CY, Zheng W-G, **Cheung AY** (Corresponding), Wu H-M. (2013) Pollen germination activates the apical membrane located RAC/ROP GTPase switch. *Mol Plant* 6, 1358-1361. (Cover)
69. Yu F, Qian L, Nibau C*, Duan Q-H*, Kita D*, Lévasséur K*, Li X, Lu C, Li H, Hou C, Li L, Buchanan BB, Chen L, **Cheung AY**, Li D, Luan S. (2012) FERONIA receptor kinase pathway suppresses abscisic acid signaling in Arabidopsis by activating ABI2 phosphatase. *Proc. Natl. Acad. Sci. USA* 109, 14693-14698.
68. Wu HM, **Cheung AY**. (2011) THESEUS and relatives: cell wall-sensing receptor- like kinases. *Curr. Opin. Plant Biol.* 14, 632-641. [A review]
67. Zou Y-j, Aggarwal M, Zheng W-G, Wu H-M, **Cheung AY**. (2011) Receptor-like kinases as surface regulators for RAC/ROP-mediated pollen tube growth and interaction with the pistil. *Arabidopsis PLANTS* 2011 plr017, doi:10.1093/aobpla/plr01770. [A review]
66. Chen M, Liu H, Kong X, Zhang N, Yang Y, Li R, Yue J, Chen D, Tian R, Li C, **Cheung AY**, Tao L-z. (2011) The RopGEF7 is required to control Plethora (PLT)-dependent maintenance of root stem cell niche in Arabidopsis. *Plant Cell* 23, 2880-2894.
65. Nieuwland J, de Graaf BHJ, **Cheung AY** (corresponding), Bosch M. (2011) Plant Reproduction: Does size matter? *New Phytologist* 190, 812-815. [A Commentary]
64. Wu H-M*, Hazak O, **Cheung AY** (corresponding), Yalovsky S. (2011) RAC/ROP GTPases and auxin signaling: A Perspective. *Plant Cell* 23, 1208-1218. [A review]
63. Nibau C, **Cheung AY**. (2011) The CrRLK family of receptor kinases -- a novel and conserved role in the control of polar cell growth: a review. *Plant Signaling and Behavior* 6, 652-656. [A review]
62. Lu Y, Chanroj S, Zulkifli L, Johnson M, Uozumi N, **Cheung AY**, Sze H. (2011) Pollen tubes lacking a pair of cation/H⁺ exchangers fail to target ovules in Arabidopsis. *Plant Cell* 23, 81-93.
61. Nibau C, Di Stilio V, Wu H-M, **Cheung AY**. (2010) Tobacco and Arabidopsis SUPERMAN regulate hormone signaling and mediate cell proliferation and differentiation. *J. Exp. Bot.* 62, 949-961.
60. Duan Q-h, Kita D, Li C, **Cheung AY** (corresponding), Wu H-M. (2010) FERONIA receptor-like kinase regulates RHO GTPase signaling of root hair development. *Proc. Natl. Acad. Sci. USA.* 107, 17821-17826.
59. **Cheung AY**, Niroomand S, Zou Y, Wu H-M. (2010) A transmembrane formin nucleates subapical actin assembly and controls tip-focused growth in pollen tubes. *Proc. Natl. Acad. Sci. USA.* 107, 16390-16395.
58. **Cheung AY**, Boavida L, Agarwal M*, Wu H-M*, Feijo J. (2010) The pollen tube journey in the pistil and imaging the in vivo process by two-photon microscopy. *J. Exp. Bot.* 61, 1907-1915. (Cover)
57. Wu H-M, Chen C, Duan Q-h, Kita D, Tao L, **Cheung AY**. (2009) Rac/Rop GTPases in the Regulation of Polarity and Polar Cell Growth. In "Integrated G Proteins Signaling in Plants", Eds. S. Yalovsky, F. Baluska, and A. Jones, Springer-Verlag.
56. Nielsen E, **Cheung AY** (corresponding), Ueda T. (2008) The regulatory RAB and ARF GTPases for vesicular trafficking. *Plant Physiology* 147, 1516-1526.
55. **Cheung AY**, Duan Q-h*, de Costa S, de Graaf B*, di Stilio V*, Wu H-M*, Feijo J. (2008) The

- dynamic pollen tube cytoskeleton: Live cell studies using actin-binding and microtubule-binding reporter proteins. *Molecular Plant* 1, 686-702.
54. Certal A, Almeida R, Carvalho L, Wong E*, Moreno N, Michard E, Rodriguez-Leon J, Wu H-M*, **Cheung AY**, Feijo J. (2008) Differential exclusion of proton ATPases from the apical membrane is associated with cell polarity and apical growth in pollen tubes. *Plant Cell* 20, 614-63.
 53. **Cheung AY**, Wu H-M. (2008) Structural and signaling networks for the polar cell growth machinery in pollen tubes. *Annu. Rev. Plant Biology* 59, 547-572. [A Review]
 52. **Cheung AY**, Wu H-M. (2007) Structural and functional compartmentation in pollen tubes. *J. Exp. Bot.* 58, 75-82. [A review]
 51. Nibau C, Wu H-M, **Cheung AY**. (2006) RAC/ROP GTPases: “Hubs” for signal integration and diversification in plants. *Trends in Plant Science* 11, 310-315. [A Review]
 50. Simoes I*, Mueller E, Otto A, Bur D, **Cheung AY**, Faro C, Pires, E. (2005) Aspartic proteinase cardosin A interacts with phospholipase D via an exposed KGE sequence. *FEBS J.* 272, 5786-5798.
 49. de Graaf BHJ*, **Cheung AY** (corresponding), Andreyeva T*, Levasseur K*, Kieliszewski M, Wu H-M.* (2005) Rab11 GTPase-regulated membrane trafficking is crucial for tip-focused Pollen tube growth in tobacco. *Plant Cell* 17, 2564-2579.
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Featured in Cell Signal: the signal transduction knowledge environment (STKE)
 47. Bosch M, **Cheung A**, Hepler P. (2005) Pectin methylesterase, a regulator of pollen tube growth. *Plant Physiology* 138, 1334-1346.
 46. **Cheung AY**, Wu, H-M. (2004) Over-expression of an Arabidopsis formin stimulates supernumerary actin cable formation from pollen tube cell membrane. *Plant Cell* 16, 257-269.
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 44. Chen CY, **Cheung AY** (corresponding), Wu H-M. (2003). Actin depolymerizing factor mediates Rac/Rop GTPase regulated pollen tube growth. *Plant Cell* 15, 237-249.
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 37. Hepler PK, Vidali L, **Cheung AY**. (2001) Polarized cell growth in higher plants. *Ann. Rev. Cell and Dev. Biol.* 17, 159-187. [A review]
 36. Wu H-M*, de Graaf B, Mariani C, **Cheung AY**. (2001) Structure and functions of hydroxyproline-rich glycoproteins in plant sexual reproductive tissues. *CMLS* 58, 1418-1429. [A review]
 35. **Cheung AY**, Wu H-M. (2000) Programmed cell death in plant reproductive development. *Plant Mol. Biol.* 44, 267-281. [A review]
 34. **Cheung AY**, Zhan X-y, Wong E, Wang H, Wu H-M. (2000) Transcription, post-transcriptional and post-translational regulation of a pollen tube growth-promoting arabinogalactanprotein. In “Cell Biology and Function of Arabinogalactan-protein”, eds. Clarke, A., Bacic, A., and Nothnagel, Pp. 133-148.

33. Wu H-M, Wong E, Ogdahl J, **Cheung AY**. (2000) A pollen tube growth-promoting arabinogalactan protein from *Nicotiana glauca* is similar to the tobacco TTS protein. *Plant J.* 22, 165-176.
32. **Cheung AY**, Wu H-M, Di Stilio V, Chen C, Glaven R, Wong E, Ogdahl J., Estavillo, A. (2000) Pollen-pistil interaction in tobacco. *Annals in Botany* 85, 29-37. [A review]
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30. **Cheung AY**, Wu H-M. (1999) Arabinogalactan proteins in plant sexual reproduction. *Protoplasma* 208, 87-98. [A review]
29. Wu H-M, **Cheung AY**. (1998) Sexual Reproduction: sex differentiation, pollination and fertilization. *Annual Plant Reviews* 1, 181-222.
28. **Cheung AY**. (1996) Pollen tube growth pathway: its contribution and response to pollination. *Sex. Plant Reproduction* 9, 330-336. [A review]
27. **Cheung AY**. (1996) Pollen-pistil interactions during pollen tube growth. *Trends in Plant Science* 1, 45-51. [A review]
26. Zhan X-y, Wu H-M, **Cheung AY**. (1996) Nuclear male sterility induced by pollen-specific expression of a ribonuclease. *Sex. Plant Reprod.* 9, 35-43.
25. Wang H, Wu H-M, **Cheung AY**. (1996) Pollination induces mRNA poly(A) tail-shortening and cell deterioration in flower transmitting tissue. *Plant J.* 9, 715-727.
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19. **Cheung AY**, McNellis T, Piekos B. (1993) Maintenance of chloroplast components during chromoplast differentiation in the tomato mutant *greenflesh*. *Plant Physiol* 101, 1223-1229.
18. Wang H, Wu H-M, **Cheung AY**. (1993) Development and pollination regulated accumulation and glycosylation of a stylar transmitting tissue-specific proline rich protein. *Plant Cell* 5, 1639-1650.
17. Wu H.M, Zou J-T, May B, Gu Q, **Cheung AY**. (1993) A tobacco gene family for flower cell wall proteins with a proline-rich domain and a cysteine-rich domain. *Proc. Natl. Acad. Sci. USA* 90, 6829-6833.
16. **Cheung AY**. (1993) Floral extracellular matrix proteins. *Flowering Newsletter* 15, 3-13.
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14. Lolle SJ, **Cheung AY**. (1993) Promiscuous germination and growth of wild type pollen from *Arabidopsis* and related species on the shoot of the *Arabidopsis* mutant, *fiddlehead*. *Dev. Biol.* 155, 250-258.
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12. Gu Q, Kawata EE, Morse M-J, Wu H-M, **Cheung AY**. (1992) A flower-specific cDNA encoding a novel thionin in tobacco. *Mol. Gen. Genet.* 234, 89-96.
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10. Kawata EE, **Cheung AY**. (1990) Molecular analysis of an aurea photosynthetic mutant (Su/Su) in tobacco: LHCP depletion leads to pleiotropic mutant phenotypes. *EMBO J.* 9, 4197-4203.

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8. **Cheung AY**, Watson L, Soll D. (1985) Two control systems modulate the level of glutaminyl-tRNA synthetase in Escherichia coli. *J. Bact.* 161, 212-218.
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Lead Editor for Special Topics Journal Issues

Receptors and Signaling (April 2020) *Plant Physiology*, Vol 182.

Co-editors: Li-Jia Qu (Peking University, China), Eugenia Russinova (Ghent University, Belgium), Cyril Ziphel (University of Zurich, Switzerland), Yunde Zhao (UC San Diego)

Flowering and Reproduction (2017) *Plant Physiology*, Vol. 173. The issue features 15 review articles and around twenty research articles in the focus area.

Co-editors: Richard Amasino (University of Wisconsin), Thomas Dresselhaus (University of Regensburg, Germany), Cris Kuhlemeier (University of Bern, Switzerland).

Editorial: Amasino R **Cheung AY** (corresponding), Dresselhaus T, Kuhlemeier C. (2017) Focus on Flowering and Reproduction. *Plant Physiol* 173, 1-4

Pollen Tube and Reproduction Biology (2013) *Molecular Plant* Vol. 6, July 2013. The issue features about 20 articles.

Co-editors, Wei-hua Tang (CAS, China), Hong-wei Xue (CAS, China), Weicai Yang (CAS, China), Ravi Palanivelu (University of Arizona).

Editorial: **Cheung AY**, Palanivelu R, Tang W-h, Xue Hong-wei, Yang W. (2013) Pollen and Plant Reproduction Biology: Blooming from East to West. *Mol. Plant* 6, 995-997

Nuclear Architecture and Dynamic (2012) *Plant Physiology* Vol. 158. The issue features a collection of 12 articles.

Co-editor, Anireddy S.N. Reddy (Colorado State University).

Editorial: **Cheung AY**, Reddy ASN. (2012) Nuclear architecture and dynamics: territories, nuclear bodies and nucleocytoplasmic trafficking. *Plant Physiol.* 158, 23-25

Membrane Trafficking (2008) *Plant Physiology* Vol. 147 (4). The issue features a collection of 26 articles.

Co-editor, Sacco de Vries (University of Wageningen, the Netherlands).

Editorial: **Cheung AY**, de Vries, S. (2008) Membrane trafficking: intracellular highways and country roads. *Plant Physiol.* 147, 1451-53

SELECTED RECENT SERVICES TO SCIENTIFIC COMMUNITY

2022-	Associate Editor, Seed Biology
2021-	Associate Editor, Molecular and Cellular Reproduction Section [EIC, Rafael Fissore, Univ. Massachusetts, Amherst] Frontiers in Cell and Developmental Biology
2012-2022	Associate Editor, Plant Physiology [an American Society of Plant Biologists (ASPB) journal]
2007-2012	Monitoring Editor, Plant Physiology
2015-	Associate Editor, Journal of Integrative Plant Biology [a Botanical Society of China, and Institute of Botany, Chinese Academy of Sciences journal]
2010-2018	Leader, NSF sponsored Research Coordination Network in Integrative Pollen Biology; activities included organized International meetings and annual workshops to foster collaborations and expand the pollen research community.
2010-	Scientific Advisory Board/Academics Advisor Board, Institute of Plant and Microbial Biology, Academia Sinica, Taiwan
Guest Editor	Molecular Plant, Plos Genetics
Member	ASPB Award Committees (Lawrence Bogorad, Early Career, ASPB Fellows, Gibbs, Steven Hales, Summer Undergraduate Internships) (Chair, several rounds)
Member	Panel member, Hong Kong Research Grants Council, Panel for Ph.D. and Postdoctoral Fellowship proposals (Spring 2022) NSF/USDA-NIFA/DOE grant review panels, multiple times (since 1900), most recent: NSF panels, once in 2019, 2020, 2021, 2022; USDA-NIFA, 2023. NIH study sessions, ad hoc Academia Sinica Interdisciplinary Thematic Grant review panels (three panels since 2015)
Ad hoc reviewer	Manuscripts and grants from US and International funding agencies, tenure and promotions, average ~45/year

SELECTED RECENT CAMPUS SERVICES

Current academic year (2022-2023)

Chair	Departmental Personnel Committee (Chair)
Member	Admissions Committee, Plant Biology Graduate Program
Member	Secretary, Phi Beta Kappa Chapter

Prior to current academic year

Member	College Personnel Committee (for tenure and promotions) (five academic years; Chair one year)
Member	Departmental Personnel Committee (15 academic years; Chair, five years)
Member	Various Faculty Search Committees (BMB and other departments)
Member	Various College or Campus-wide Awards Committees Conti Faculty Fellowship Vice Chancellor of Research Review Committee (AY 2019-2020) CNS Conti Faculty Fellowship Committee (AY 2020-2021) CNS Faculty Awards Committee (Research Teaching and Service) (three years) Mahoney Paper First Round Selection Committee (a CNS award for best paper with translational potential) (three years)

Member Plant Biology Admissions Committee (five years)
Member University Writing Committee [oversees University-wide writing Programs] (three years), participated in a Quinquennial Review of campus Junior Year Writing courses
Secretary University of Massachusetts, Amherst, Phi Beta Kappa Chapter (two years)