

Claire A. Rinehart, Ph.D.

Department of Biology, Ogden College of Science & Engineering
Western Kentucky University, Bowling Green, KY 42101

Professional Preparation

Brigham Young University	Microbiology	BS	1977
Brigham Young University	Botany	M.S.	1979
University of Georgia	Botany	Ph.D.	1984
University of Wisconsin-Madison	Virology		1984-1988

Professional Appointments

Western Kentucky University; August 2008 – Present; Professor; Department of Biology
Western Kentucky University; August 1994 – 2008; Associate Professor; Department of Biology

Western Kentucky University; August 1988 – August 1994; Assistant Professor; Department of Biology

University of Wisconsin-Madison; January 1987 – August 1988; Research Associate; Institute for Molecular Virology

University of Wisconsin-Madison; January 1984 – January 1987; Postdoctoral Fellow; Institute for Molecular Virology

Publications (in last eight years) (* student authors)

- Jacobs-Sera, D., Abad, L.A., Alvey, R.M., Anders, K.R., Aull, H.G., Bhalla, S.S., Blumer, L.S., Bollivar, D.W., Bonilla, J.A., Butela, K.A., Coomans, R.J., Cresawn, S.G., D'Elia, T., Diaz, A., Divens, A.M., Edgington, N.P., Frederick, G.D., Gainey, M.D., Garlena, R.A., Grant, K.W., Gurney, S.M.R., Hendrickson, H.L., Hughes, L.E., Kenna, M.A., Klyczek, K.K., Kotturi, H., Mavrich, T.N., McKinney, A.L., Merkhofer, E.C., Parker, J.M., Molloy, S.D., Monti, D.L., Pape-Zambito, D.A., Pollenz, R.S., Pope, W.H., Reyna, N.S., Rinehart, C.A., Russell, D.A., Shaffer, C.D., Sivanathan, V., Stoner, T.H., Stuke, J., Sunnen, C.N., Tolsma, S.S., Tsourkas, P.K., Wallen, J.R., Ware, V.C., Warner, M.H., Washington, J.M., Westover, K.M., Whitefleet-Smith, J.L., Wiersma-Koch, H.I., Williams, D.C., Zack, K.M., Hatfull, G.F.. (Jun. 2020) "Genomic diversity of bacteriophages infecting *Microbacterium* spp" PLoS One 15: e0234636. Published online 2020 Jun 18. doi: 10.1371/journal.pone.0234636.
- *Gudlavalleti, B.S., *Phung, T., *Barton, C.L., *Becker, A., *Graul, B.L., *Griffin, J.T., *Hays, C.J., *Horn, B., *Liang, D.R., *Rutledge, L.M., *Szalanczy, A.M., *Gaffney, B.L., *King, R.A., *Rinehart, C.A., *Staples, A.K., *Stewart, A.A., *Nydam, M.L., *O'Quin, K.E. (Jun. 2020) "Whole genome sequencing identifies an allele responsible for clear vs. turbid plaque morphology in a Mycobacteriophage." BMC Microbiol. 20:148. Doi: 10.1186/s12866-020-01833-4.
- Klyczek, K.K., Jacobs-Sera, D., Adair, T.L., Adams, S.D., Ball, S.L., Benjamin, R.C., Bonilla, J.A., Breitenberger, C.A., Daniels, C.J., Gaffney, B.L., Harrison, M., Hughes, L.E., King, R.A., Krukonis, G.P., Lopez, A.J., Monsen-Collar, K., Pizzorno, M.C., Rinehart, C.A., SEA-PHAGES Program, PHIRE Program, Staples, A.K., Stowe, E.L.,

Garlena, R.A., Russell, D.A., Cresawn, S.G., Pope, W.H., Hatfull, G.F. (Feb., 2018) “Complete Genome Sequences of 44 *Arthrobacter* Phages” Genome Announcements DOI: 10.1128/genomeA.01474-17

- King, R.A., Slowan-Pomeroy, T.M., Thomas, J.E., *Ahmed, T., *Alexander, K.L., *Biddle, J.M., *Daniels, M.K., *Rowlett, J.R., *Senay, T.E., Rinehart, C.A., Staples, A.K., Rowland, N.S., Gaffney, B.L., Emmons, C.B., Hauk, M.D., Nguyen, R.L., Naegele, L., Strickland, S.S., Briggs, L.A., Rush, A.N., Saha, S., Sadana, R., Cresawn, S.T., Russell, D.A., Garlena, R.A., Pope, W.H., Jacobs-Sera, D., Hatfull, G.F. (Nov. 2017) “Genome Sequences of Subcluster K5 Mycobacteriophages AlleyCat, Edugator, and Guillsminger.” Genome Announcement 5: e01122-17.
- Klyczek, K.K., Bonilla, J.A., Jacobs-Sera, D., Adair, T.L., Afram, P., Allen, K.G., Archambault, M.L., Aziz, R.M., Bagnasco, F.G., Ball, S.L., Barrett, N.A., Benjamin, R.C., Blasi, C.J., Borst, K., Braun, M.A., Broomell, H., Brown, C.B., Brynell, Z.S., Bue, A.B., Burke, S.O., Casazza, W., Cautela, J.A., Chen, K., Chimalakonda, N.S., Chudoff, D., Connor, J.A., Cross, T.S., Curtis, K.N., Dahlke, J.A., Deaton, B.M., Degroote, S.J., DeNigris, D.M., DeRuff, K.C., Dolan, M., Dunbar, D., Egan, M.S., Evans, D.R., Fahnestock, A.K., Farooq, A., Finn, G., Fratus, C.R., Gaffney, B.L., Garlena, R.A., Garrigan, K.E., Gibbon, B.C., *Goedde, M.A., Guerrero Bustamante, C.A., Harrison, M., Hartwell, M.C., Heckman, E.L., Huang, J., Hughes, L.E., Hyduchak, K.M., Jacob, A.E., Kaku, M., Karstens, A.W., Kenna, M.A., Khetarpal, S., King, R.A., Kobokovich, A.L., Kolev, H., Konde, S.A., Kriese, E., Lamey, M.E., Lantz, C.N., Lapin, J.S., Lawson, T.O., Young Lee, I., Lee, S.M., Lee-Soety, J.Y., Lehmann, E.M., London, S.C., Lopez, A.J., Lynch, K.C., Mageeney, C.M., Martynyuk, T., Mathew, K.J., Mavrich, T.N., McDaniel, C.M., McDonald, H., McManus, C.J., Medrano, J.E., Mele, F.E., Menninger, J.E., Miller, S.N., Minick, J.E., Nabua, C.T., Napoli, C.K., Nkangabwa, M., *Oates, E.A., Ott, C.T., Pellerino, S.K., Pinamont, W.J., Pirnie, R.T., Pizzorno, M.C., Plautz, E.J., Pope, W.H., Pruett, K.M., Rickstrew, G., Rimple, P.A., Rinehart, C.A., Robinson, K.M., Rose, V.A., Russell, D.A., Schick, A.M., Schlossman, J., Schneider, V.M., Sells, C.A., Sieker, J.W., Silva, M.P., Silvi, M.M., Simon, S.E., Staples, A.K., Steed, I.L., Stowe, E.L., Stueven, N.A., Swartz, P.T., Sweet, E.A., Sweetman, A.T., Tender, C., Terry, K., Thomas, C., Thomas, D.S., Thompson, A.R., Vanderveen, L., Varma, R., Vaught, H.L., Vo, Q.D., Vonberg, Z.T., Ware, V.C., Warrad, Y.M., Wathen, K.E., Weinstein, J.L., Wyper, J.F., Yankauskas, J.R., Zhang, C., Hatfull, G.F. (July 2017) “Tales of diversity: Genomic and morphological characteristics of forty-six *Arthrobacter* phages.” PLoS One. 12: e0180517.
- Shukla D., Rinehart C.A., Sahi S.V. (June 2017) “Comprehensive study of excess phosphate response reveals ethylene mediated signaling that negatively regulates plant growth and development.” Sci Rep. 7:3074. doi:10.1038/s41598-017-03061-9.
- Dedrick, R.M., Jacobs-Sera, D., Guerrero Bustamante, C.A., Garlena, R.A., Mavrich, T.N., Pope, W.H., Cevantes Reyes, J.C., Russell, D.A., Adair, T., Alvey, R., Bonilla, J.A., Bricker, J.S., Brown, B.R., Byrnes, D., Cresawn, S.G., Davis, W.B., Dickson, L.A., Edgington, N.P., Findley, A.M., Golebiewska, U., Grose, J.H., Hayes, C.F., Hughes, L.E., Hutchinson, K.W., Isern, S., Johnson, A.A., Kenna, M.A., Klyczek, K.K., Mageeney, C.M., Michael, S.F., Molloy, S.D., Montgomery, M.T., Neitzel, J., Page, S.T., Pizzorno, M.C., Poxleitner, M.K., Rinehart, C.A., Robinson, C.J., Rubin, M.R., Teyim, J.N., Vazquez, E., Ware, V.C., Washington, W., Hatfull, G.F. (Jan. 2017) “Prophage-

mediated defense against viral attack and viral counter-defense.” *Nature Microbiology* 2, 16251 | DOI: <http://www.nature.com/articles/nmicrobiol2016251>

- Pope, W.H., Bowman, C.A., Russell, D.A., Jacobs-Sera, D., Asai, D.J., Cresawn, S.G., Jacobs, W.R., Hendrix, R.W., Lawrence, J.G., Hatful, G.F., Science Education Alliance Phage Hunters Advancing Genomics and Evolutionary Science, Phage Hunters Integrating Research and Education, and Mycobacterial Genetics Course. (2015) “Whole genome comparison of a large collection of mycobacteriophages reveals a continuum of phage genetic diversity.” *eLife* 2015; 4: e06416. <https://elifesciences.org/content/4/e06416> (Role: Supporting Author from SEA-PHAGES, *A number of WKU students are listed as supporting authors.)
- Pope W.H., Anders K.R., Baird M., Bowman C.A., Boyle M.M., Broussard G.W., Chow T., Clase K.L., Cooper S., Cornely K.A., Dejong R.J., Delesalle V.A., Deng L., Dunbar D., Edgington N.P., Ferreira C.M., Hafer K.W., Hartzog G.A., Hatherill J.R., Hughes L.E., Ipapo K., Krukoni G.P., Meier C.G., Monti D.L., Olm M.R., Page S.T., Peebles C.L., Rinehart C.A., Rubin M.R., Russell D.A., Sanders E.R., Schoer M., Shaffer C.D., Wherley J., Vazquez E., Yuan H., Zhang D., Cresawn S.G., Jacobs-Sera D., Hendrix R.W., Hatfull G.F. (2014) “Cluster M mycobacteriophages Bongo, PegLeg, and Rey with unusually large repertoires of tRNA isotypes.” *J. Virol.* 88:March 2014.
- *Forbes-Stoval, J., *Howton, J., Young, M., *Davis, G., *Chandler, T., Kessler, B., Rinehart, C.A., Jacobshagen, S. (2013) “*Chlamydomonas reinhardtii* strain CC-124 is highly sensitive to blue light in addition to green and red light in resetting its circadian clock, with the blue-light photoreceptor plant cryptochrome likely acting as negative modulator.” *Plant Physiol Biochem.* 2013 Dec 12;75C:14-23.
- *Kapadia, C., Rinehart, C.A. (2013) “Ab Initio prediction of mycobacteriophages protein structure and function.” *BMC Bioinformatics* 14,(Suppl 17):A10.
- *Gill, E.S., Rinehart, C.A. (2013) “Comparison of codon usage in mycobacteriophages with and without tRNAs in their genomes.” *BMC Bioinformatics* 14,(Suppl 17):A9.
- *Parrish, M.L., Rinehart, C.A. (2013) “Correlation of geographical distribution of mycobacteriophages with genomic clusters and genome distance.” *BMC Bioinformatics* 14,(Suppl 17):A8.
- *Rajandinakaran, G., Sun, H., Rinehart, C.A., Rouchka, E., and Smith, M. (2012) “Regulation of cell proliferation and apoptosis by growth hormone during zebrafish auditory hair cell regeneration.” *BMC Bioinformatics* 13,(Suppl 12):A3.

Direct genome submissions to GenBank. Peer-reviewed by the Pittsburgh Bacteriophage Institute. The first 19 genomes have been published in the last year. The next 41 were published the year before. In total, 95 genomes have been published with since 2011 with 398 WKU student authors and 282 student authors from other schools. (WKU student authors highlighted in yellow, students from other schools are highlighted in blue or green)

OfUltron, Jul. 2020, 1 [Morehead State University](#) and 2 [Spalding University](#) students
ACCESSION: [MT889397](#)

[Hill, K.M.](#), [Blanton, M.N.](#), Doyle, J., [Rose, E.](#), Hare, J.M., Peyton, D.K., Gearner, G.W., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D. and Hatfull, G.F.

Bartimeaus, Jul. 2020, 1 **Sommerset Community College** and 2 **Spalding University** students
ACCESSION: **MT889390**

Blanton, M.N., **Hill, K.M.**, Doyle, J.F., **Barnett, M.**, Starnes, J.H., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D. and Hatfull, G.F.

TroyPIA, Jul. 2020, 5 **Lindsey Wilson College** students

ACCESSION: **MT889382**

Johnson, M.B., **Warner, J.P.**, **Sharp, L.M.**, **Streets, L.E.**, Clauson, M.P., **Butler, T.**, Ellis, T.M., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D. and Hatfull, G.F.

Sebastian, Jul. 2020, 1 **Morehead State University** student

ACCESSION: **MT889396**

Cyrus, K.R., Hare, J.M., Peyton, D.K., Gearner, G.W., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D. and Hatfull, G.F.

Centrecat, July 2020, 13 **Centre College** students

ACCESSION: **MT889386**

Luken, T.N., **Hargrove, S.L.**, **Feely, S.A.**, **King, A.E.**, **Wolfe, J.N.**, **Liu, Z.**, **Ballard, A.T.**, **Stewart, T.A.**, **Potter, J.**, **Dutton, K.G.**, **O'Quin, K.E.**, **Maloney, E.M.**, **Flatt, A.B.**, **Barton, C.**, **Nydam, M.N.**, Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D. and Hatfull, G.F.

Glamour, Jun. 2020, 9 **WKU Students**

ACCESSION: **MT553340**

Khashimov, M.N., **Gay, L.R.**, **Spencer, J.R.**, **Borish, E.D.**, **Almustafa, H.M.**, **Kreuzer, G.L.**, **Markham, B.N.**, **Shreve, M.E.**, **Tamminga, T.L.**, King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

Luxx, May. 2020, 5 **WKU Students**

ACCESSION **MT498038**

Garrett, B.P., **Bankhead, B.T.**, **Sanford, A.J.**, **Conover, J.R.**, **Hall, R.H.**, King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

Livingwater, May. 2020, 6 **WKU Students**

ACCESSION **MT498040**

Crawford, M.S., **Nole, E.M.**, **Henning, J.G.**, **Osborne, M.E.**, **Vanderburg, C.R.**, **Murillo-Ruiz, R.J.**, King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

Jahseh, May 2020, 5 **WKU Students**

ACCESSION **MT498051**

Baumer,J.W., Summers,J.C., Poynter,M.K., Satish,D., Perez Galindo,K.E., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

FiringLine, May 2020, 15 **WKU** and 1 **Morehead State University** students

ACCESSION: **MT498060**

Razor,W.D., **Cook,E.D.**, **Lich,A.K.**, **Wright,J.S.**, **Hartline,R.L.**, **White,A.L.**, **Jones,K.L.**, **Stansfield,T.H.**, **Norris,A.M.**, **Booher,J.H.**, **Bacon,B.F.**, **Russ,E.Y.**, **Decker,K.S.**, **Jones,K.L.**, **Siler,C.**, **Daye,P.B.**, **Peyton,D.K.**, **Hare,J.M.**, **Gearner,G.W.**, **Gaffney,B.L.**, **Staples,A.K.**, **King,R.A.**, **Rinehart,C.A.**, **Rowland,N.S.**, **Garlena,R.A.**, **Russell,D.A.**, **Pope,W.H.**, **Jacobs-Sera,D.**, **Hendrix,R.W.** and **Hatfull,G.F.**

BGIlluviae, Mar. 2020, 9 **Centre College** students

ACCESSION: **MN908692**

Phung,T., **Barton,C.L.**, **Rutledge,L.M.**, **Liang,D.R.**, **Gudlavalleti,B.S.**, **Szalanczy,A.M.**, **Griffin,J.T.**, **Hays,C.J.**, **Graul,B.L.**, **O'Quin,K.**, **Gaffney,B.L.**, **Staples,A.K.**, **King,R.A.**, **Rinehart,C.A.**, **Garlena,R.A.**, **Russell,D.A.**, **Pope,W.H.**, **Jacobs-Sera,D.**, **Hendrix,R.W.** and **Hatfull,G.F.**

KyMonks1A, Nov. 2019, 1 **Bluegrass Community and Technical College** student, 3 **Spalding University** students

ACCESSION: **MN369760**

McCormick,K., **Compton,A.N.**, **Railey,J.M.**, **Gordon,P.T.**, **Doyle,J.**, **Gaffney,B.L.**, **Staples,A.K.**, **King,R.A.**, **Rinehart,C.A.**, **Rowland,N.S.**, **Garlena,R.A.**, **Russell,D.A.**, **Pope,W.H.**, **Jacobs-Sera,D.**, **Hendrix,R.W.** and **Hatfull,G.F.**

Mithril, Nov. 2019, 1 **Spalding University** student

ACCESSION: **MN369759**

Magre, M.D., **Doyle,J.**, **Gaffney,B.L.**, **Staples,A.K.**, **King,R.A.**, **Rinehart,C.A.**, **Garlena,R.A.**, **Russell,D.A.**, **Pope,W.H.**, **Jacobs-Sera,D.**, **Hendrix,R.W.** and **Hatfull,G.F.**

Inky, Nov. 2019, 3 **Spalding University** students

ACCESSION: **MN369746**

Miller, K., **Farnsley,B.A.**, **Magre,M.D.**, **Doyle,J.**, **Gaffney,B.L.**, **Staples,A.K.**, **King,R.A.**, **Rinehart,C.A.**, **Garlena,R.A.**, **Russell,D.A.**, **Pope,W.H.**, **Jacobs-Sera,D.**, **Hendrix,R.W.** and **Hatfull,G.F.**

Spock, Nov. 2019, 3 **Spalding University** students

ACCESSION: **MN369742**

Colburn,K., **Farnsley,B.A.**, **Magre,M.D.**, **Doyle,J.**, **Gaffney,B.L.**, **Staples,A.K.**, **King,R.A.**, **Rinehart,C.A.**, **Garlena,R.A.**, **Russell,D.A.**, **Pope,W.H.**, **Jacobs-Sera,D.**, **Hendrix,R.W.** and **Hatfull,G.F.**

GtownJaz, Nov. 2019, 11 **Bellarmino Students**, 1 **Georgetown**

ACCESSION **MN497953**

Z,J.A., Fleming,B., Galluzzi,E., Hill,M., Miller,A., Moore,V., Neilson,E., Powers,M.G., Ritsch,C., Robinson,H., Sprague,M. Watts,J., Christensen,M., Johnson,M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

AbbysRanger, Oct. 2019, 14 **Bellarmino Students**, 1 **Georgetown student**

ACCESSION **MN284905**

Attwood, A.L., Buettner,A., Condon,A., Dyer,D., Frazier,B., Haynes,E., Joldrichsen,E., Laws,E., Moore,A., Obrien,G., Patterson,F., Powers,M.G., Robinson,G., Watts,J., Wilkerson,C., Christensen,M., Johnson,M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

GaugeLDP, Oct. 2019, 11 **Bellarmino Students**, 1 **Georgetown student**

ACCESSION **MN284903**

Pederson,L., Astra.A., Cravens,A., Ghinn,A., Hass,T., Krell,C., Mattingly,K., Pandler,K., Pawley,Elk Powers,M.G., Weeden,J., Christensen,M., Johnson,M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

JeppNRM, Oct. 2019, 12 **Bellarmino Students**, 1 **Georgetown**

ACCESSION **MN284900**

M,N.R., Allen, T., Angelov,A., Carr,V., Condon,A., Dorsch,R., Finerty,J., Hass,T., Powers,M.G., Roach,S., Soard,L., Steinke,K., Velasquez,K., Christensen,M., Johnson,M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Clancy, May 2019, 6 **WKU Students**

ACCESSION **MK967400**

Johnson,M.P., Morgan,E.A., Mullick,M., Ramiseti,H., Danturthi,A.N., Cooper,N.G., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Groupthink, May 2019, NYR June 2019, 7 **WKU Students**

ACCESSION **MK967399**

Jackson,C.S., Richardson,M.C., Simpson,A.T., White,A.K., Boyareddygari,S.P., Wright,A.K., **Mingus,L.O.**, Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

JEGGS, May 2019, NYR June 2019, 7 **WKU Students**

ACCESSION **MK967398**

Guernsey,E.K., Negron,L.R., Berry,L.J., Littrell,K.M., Buckley,J.V., Suter,H.M., Newton,W.J., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

LilyLou, May 2019, NYR June 2019, 8 **WKU Students**

ACCESSION [MK894438](#)

Berry,L.J., Reagor,J.P., Chani,A.S., Suter,H.M., Vanzant,E.P., Fields,E.J., Sabotchick,N.R., Mahoney,L.M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Mahavrat, May 2019, NYR June 2019, 7 [WKU Students](#)

ACCESSION [MK967397](#)

Patel,D., Jones,M.J., Williams,H.E., Harmon,A.N., Tarter,E.D., Gaekle,K.N., Maryyam,S., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Tangerine, May 2019, NYR June 2019, 7 [WKU Students](#)

ACCESSION [MK967396](#)

Jenkins,W.A., Byrn,A.B., Chan,N.T., Estes,M.L., McMahan,A.T., Moore,J.M., Tauchert,M.H., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

WideWale, May 2019, 8 [WKU Students](#) and 9 [Bellarmine University Students](#)

ACCESSION [MK967395](#)

Alexander,K.L., Espinoza,S.D., Hackworth,B.N., Hodge,B.C., Johnson,B.M., McAfee,E.A., Mcclurg,G.M., Werle,A.E., Pham,S., Powers,M., McDonald,V., Rogers,Z., Reinstedler,M., Scheller,J., Schwartz,M., South,K., Wilkerson,C., Wilson,M., Gaffney,B.L., Staples, A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Chotabhai, Feb 2019, NYR Apr Mar 2019, 4 [WKU Students](#)

ACCESSION [MK801726](#)

Gondal,A., Hendrickson,E.C., Halmadine,O.M., Ellis,M.J., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Lilizi, Feb 2019, 6 [WKU Students](#)

ACCESSION [MK757445](#)

Uhls,I.G., Cash,A.M., Vranjkovina,E., Martinez,Z.C., Herschberg,M.B., Moe,E., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

HanKaySha, Feb 2019, 3 [WKU Students](#)

ACCESSION [MK620893](#)

Shapiro,H.K., Hoffman,G.A., Davis,M.N., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Moldemort, Feb 2019, 8 [WKU Students](#)

ACCESSION [MK559429](#)

Ackermann,S.L., Chinkers,M.A., Peden,E.P., Moreman,J.K., Brown,M.Q., Law,E.J., Dillard,C.P., Crider,K.E., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

HenryJackson, Feb 2019, 5 **WKU Students**

ACCESSION [MK494104](#)

Lamb,E.A., Stewart,A., Knerr,R.M., Mir,S., Dames,A.K., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Elephantoon, Feb 2019, 4 **Eastern Kentucky University Students**

ACCESSION [MK559428](#)

Donkin,R.W., Pierce,M., Nelson,K.S., Caudill,H.R., Spencer,E., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Niklas, Jan 2019, 2 **Georgetown College Students**

ACCESSION [MK494120](#)

Johnson,N., McClure,M.G., Christensen,M., Johnson,M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Malec, Dec 2018, 3 **WKU Students**

ACCESSION [MK284522](#)

Thompson,B.N., Stekardis,J.M., Congleton,H.K., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Citius, Dec 2018, 2 **Morehead State University Students**

ACCESSION: [MK279902](#)

Carrington,J.A., Rose,E.N., Hare,J.M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Cici, Dec 2018, 3 **WKU Students**

ACCESSION [MK279898](#)

Thompson,B.A., Kassinger,B.N., Brown,G.D., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Acquire49, Dec 2018, 3 **Somerset Community College Students**

ACCESSION [MK279905](#)

Tyler,B.A., Starnes,J.H., Mosley,E., Stratmann,S.W., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Squiggle, Oct 2018, 6 WKU Students

ACCESSION [MK112553](#)

Curry,C.W., Nguyen,E.H., Guernsey,E.K., Marquardt,J., Perez,M.T., Patel,D., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Kalb97, Oct 2018, 3 Morehead State University Students

ACCESSION [MK112543](#)

Baldrige,K.A., Cook,B.J., Wright,A.V., Gaffney,B.L., Staples,A.K., ,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Capricorn, Oct 2018, 4 Bowling Green High School Students

ACCESSION [MK112537](#)

Staples,A.K., Chhabra,S.A., Chang,S.T., Gover,H.T., Sandhu,A., Gaffney,B.L., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Centaur, Oct 2018, 4 Bowling Green High School Students

ACCESSION [MK061408](#)

Staples,A.K., Chhabra,S.A., Chang,S.T., Gover,H.T., Sandhu,A., Gaffney,B.L., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Schadenfreude, Sept 2018, 1 WKU Student

ACCESSION [MH926060](#)

Urso,O., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Ruin, Aug 2018, 1 WKU Student, 4 Bowling Green High School Students

ACCESSION [MH825710](#)

Brickeen,X.K., Chhabra,S.A., Chang,S.T., Gover,H.T., Sandhu,A., Gaffney,B.L., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

LilTurb, Aug 2018, 2 WKU Students

ACCESSION [MH825704](#)

Watkins,H.A., Crews,N.M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

NearlyHeadless, Aug 2018, 3 WKU Students

ACCESSION [MH825708](#)

Ahmed,T., Biddle,J.M., Daniels,M.K., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Flare16, Aug 2018, NYR Oct 2018, 5 WKU students, ACCESSION [MH825701](#)

Khan,S., Brickeen,X.K., Carroll,A.N., Gregory,C.T., Urso,O., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Gemini, Aug 2018, NYR Oct 2018, 8 WKU students, ACCESSION [MH779503](#)

Westerman,E.W., Cook,M.K., Freeman,C.A., Lindsey,C., Ganesh,R., Tomko,M.R., Jenkins,W.A., Harris,J.C., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Getalong, Aug 2018, NYR Oct 2018, 6 WKU students, ACCESSION [MH779504](#)

King,R.A., Ngong,N.B., Xu,E.M., Austin,H.D., Shervin,T.J., Anderson,J.K., Watkins,T.N., Gaffney,B.L., Staples,A.K., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

LilTurb, Aug 2018, NYR Oct 2018, 2 WKU students, ACCESSION [MH825704](#)

Watkins,H.A., Crews,N.M., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

NearlyHeadless, Aug 2018, NYR Oct 2018, 3 WKU students, ACCESSION [MH825708](#)

Ahmed,T., Biddle,J.M., Daniels,M.K., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Ruin, Aug 2018, NYR Oct 2018, WKU student, 4 Bowling Green High School students, ACCESSION [MH825710](#)

Brickeen,X.K., Sandhu,A., Chhabra,S.A., Chang,S.T., Gover,H.T., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Schadenfreude, Aug 2018, NYR Oct 2018, 1 WKU student, ACCESSION [MH926060](#)

Urso,O., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Dalmuri, Aug 2018, 8 WKU students, ACCESSION [MH727544](#)

Rowlett,J.R., Curry,C.W., Nguyen,E.H., Guernsey,E.K., Marquardt,J., Perez,M.T., Simpson,O.C., Patel,D., Gaffney,B.L., Staples,A.K., King,R.A., Rinehart,C.A., Rowland,N.S., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.

Wizard007, Aug 2018, 16 WKU students, 4 Bowling Green High School students, ACCESSION [MH727563](#)

Perkins, M.C., TamarapuParthasarathy, P., Schrader, S.M., Olberding, J.R., Scaff, T.L., Forshee, J.I., Anyanwu, E.I., Cole, K.G., Driver, K.B., Farnsworth, E.M., Falcone, C.A., Howard, B.G., Howard, B.E., Howard, C.M., Sayre, H.L., Fagan, M.B., Chhabra, S.A., Chang, S.T., Gover, H.T., Sandhu, A., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

MuchMore, Aug 2018, 4 students, Morehead State University, ACCESSION MH727554
McElroy, D.A., Robinson, M.R., Walsburger, C.S., Peyton, D.K., Clemons, R.P., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

Belladonna, Jul 2018, 5 WKU students, ACCESSION [MH697578](#)
Wei, S., Cook, M.K., Naidugari, J.R., Sohne, Z.N., Hawkins, O., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

KristaRAM, Jul 2018, 5 students, Lindsey Wilson College, ACCESSION MH651178
Marker, K.J., Johnson, R.A., Jones, B.A., Hensley, O.B., Delamare, B.J., Bricker, A.D., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

Dixon, Jul 2018, 7 students, Georgetown College, ACCESSION MH651173
Thoman, I.M., Billings, B.H., Hines, M.K., Atwood, A.L., Bambach, A.B., Lenberger, N.M., Eden, K.M., Christensen, M., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

QueenBeesly, Jul 2018, 3 students, Morehead State University, ACCESSION MH697591
Carter, T.S., Branham, J.R., Peyton, D.K., Patel, I., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

Tapioca, Jul 2018, 10 students, Morehead State University, ACCESSION MH697593
Eastep, L.A., Frommeyer, J.R., Wei, S., Ryan, A.J., Holt, M.O., Dillingham, M.E., Kitchens, C., Shelton, D.A., Gerner, C.V., Edds, A.C., Gaffney, B.L., Staples, A.K., King, R.A., Rinehart, C.A., Rowland, N.S., Garlena, R.A., Russell, D.A., Pope, W.H., Jacobs-Sera, D., Hendrix, R.W. and Hatfull, G.F.

Synergistic Activities

- Founder and co-director of the Bioinformatics and Information Science Center (BISC) at WKU. BISC is a collaborative center, with faculty/staff members from multiple departments and colleges, that supports cross-disciplinary research in bioinformatics and information science. (2006 – present).
- Director and PI for the High Performance Computing Center (HPCC) at WKU. The HPCC is administered under BISC and provides computing support for research,

collaborations and the educational mission of WKU. (2010 – present).

- Collaborator with Dr. Mark Farman, University of Kentucky on “Telomere Roles in Fungal Genome Evolution” (2017-Present).
- Co-PI with Dr. Rodney King in the HHMI SEA-PHAGES (Science Education Alliance - Phage Hunters Advancing Genomics and Evolutionary Science). Our Genome Discovery and Exploration program engages 20-40 freshman and sophomore students in a year long research project to isolate, purify, sequence, annotate and publish bacteriophage genomes (2009 – present).
- Co-PI with Dr. Rodney King in HHMI SEA-GENES (Science Education Alliance – Gene-function Exploration by a Network of Emerging Scientists). In the GENES course students clone and screen phage genes for toxicity and functional interactions with host and phage genes.

Collaborators & Other Affiliations

- Collaborators
 - Dr. Mark Farman, University of Kentucky. “Telomere Roles in Fungal Genome Evolution”, NSF grant \$725,000 (As collaborator on grant: WKU portion \$68,000)..
 - Dr. Rodney King, Western Kentucky University
 - Dr. Graham Hatfull, University of Pittsburg
 - Dr. Welkin Pope, University of Pittsburg
 - Dr. Debra Jacobs-Sera, University of Pittsburg
 - Dr. Kinchel Doerner, North Dakota State University
 - Dr. Johnathan Whetstine, Harvard University
 - Dr. Nicholas Dyson, Harvard University
 - Dr. Jonathan Quiton, Western Kentucky University
 - Dr. Sigrid Jacobshagen, Western Kentucky University
 - Dr. Bruce Kessler, Western Kentucky University
 - Dr. Shivendra Sahi, Western Kentucky University
 - Dr. Devesh Shukla, Western Kentucky University
 - Dr. Phil Womble, EWA, Western Kentucky University
- Thesis Advisor and Postgraduate-Scholar Sponsor.
 - Jitesh Tiwari 2010 – 2012, Industry
 - ReddySailaja Marpuri 2007 – 2009, Washington University
 - Pongsathorn Chotikasemsri 2006 – 2008 , Industry
 - Avinash Baktula 2001 – 2003, Universityof Cincinnatti