

## Publications for Nicholas Coleman

### 2018

La Cecilia, D., Tang, F., Coleman, N., Conoley, C., Vervoort, R., Maggi, F. (2018). Glyphosate dispersion, degradation, and aquifer contamination in vineyards and wheat fields in the Po Valley, Italy. *Water Research*, 146, 37-54. <a href="http://dx.doi.org/10.1016/j.watres.2018.09.008">[More Information]</a>

McCarl, V., Somerville, M., Ly, M., Henry, R., Liew, E., Wilson, N., Holmes, A., Coleman, N. (2018). Heterologous expression of Mycobacterium alkene monooxygenases in Gram-positive and Gram-negative bacterial hosts. *Applied and Environmental Microbiology*, 84(15), 1-16. <a href="http://dx.doi.org/10.1128/AEM.00397-18">[More Information]</a>

### 2017

Munro, J., Kimyon, O., Rich, D., Koenig, J., Tang, S., Low, A., Lee, M., Manefield, M., Coleman, N. (2017). Co-occurrence of genes for aerobic and anaerobic biodegradation of dichloroethane in organochlorine-contaminated groundwater. *FEMS Microbiology Ecology*, 93(11), 1-11. <a href="http://dx.doi.org/10.1093/femsec/fix133">[More Information]</a>

Tang, F., La Cecilia, D., Vervoort, R., Coleman, N., Conoley, C., Maggi, F. (2017). Integrating biological degradation potential into ecological risk assessment. *22nd International Congress on Modelling and Simulation (MODSIM 2017)*, Australia: Modelling and Simulation Society of Australia and New Zealand Inc (MSSANZ).

Waring, C., Haskin, S., Griffith, D., Kertesz, M., Kobylski, V., Wilson, N., Coleman, N., Kettlewell, G., Zlot, R., Bosse, M., et al (2017). Seasonal total methane depletion in limestone caves. *Scientific Reports*, 7(1), 1-12. <a href="http://dx.doi.org/10.1038/s41598-017-07769-6">[More Information]</a>

Graziotto, M., Akerfeldt, M., Gunn, A., Yang, K., Somerville, M., Coleman, N., Roberts, B., Hambley, T., New, E. (2017). The influence of the ethane-1,2-diamine ligand on the activity of a monofunctional platinum complex. *Journal of Inorganic Biochemistry*, 177, 328-334. <a href="http://dx.doi.org/10.1016/j.jinorgbio.2017.07.029">[More Information]</a>

### 2016

Munro, J., Liew, E., Ly, M., Coleman, N. (2016). A New Catabolic Plasmid in Xanthobacter and Starkeya spp. from a 1,2-Dichloroethane-Contaminated Site. *Applied and Environmental Microbiology*, 82(17), 5298-5308. <a href="http://dx.doi.org/10.1128/AEM.01373-16">[More Information]</a>

Dingsdag, S., Nelson, S., Coleman, N. (2016). Bacterial communities associated with apical periodontitis and dental implant failure. *Microbial Ecology in Health and Disease*, 27, 1-8. <a href="http://dx.doi.org/10.3402/mehd.v27.31307">[More Information]</a>

### 2015

Fung, H., Gadd, M., Drury, T., Cheung, S., Guss, M., Coleman, N., Matthews, J. (2015). Biochemical and biophysical

characterisation of haloalkane dehalogenases DmrA and DmrB in Mycobacterium strain JS60 and their role in growth on haloalkanes. *Molecular Microbiology*, 97(3), 439-453. <a href="http://dx.doi.org/10.1111/mmi.13039">[More Information]</a>

### 2014

Coleman, N., Richardson, J., Wilson, N., Holmes, A. (2014). Insertion sequence ISPst4 activates pUC plasmid replication in Pseudomonas stutzeri. *FEMS Microbiology Letters*, 356(2), 242-249. <a href="http://dx.doi.org/10.1111/1574-6968.12417">[More Information]</a>

Liew, E., Tong, D., Coleman, N., Holmes, A. (2014). Mutagenesis of the hydrocarbon monooxygenase indicates a metal centre in subunit-C, and not subunit-B, is essential for copper-containing membrane monooxygenase activity. *Microbiology*, 160(Pt 6), 1267-1277. <a href="http://dx.doi.org/10.1099/mic.0.078584-0">[More Information]</a>

Martin, K., Ozsvar, J., Coleman, N. (2014). SmoXYB1C1Z of Mycobacterium sp. Strain NBB4: a Soluble Methane Monooxygenase (sMMO)-Like Enzyme, Active on C2 to C4 Alkanes and Alkenes. *Applied and Environmental Microbiology*, 80(18), 5801-5806. <a href="http://dx.doi.org/10.1128/AEM.01338-14">[More Information]</a>

### 2013

Munro, J., Liew, E., Coleman, N. (2013). Adaptation of a Membrane Bioreactor to 1,2-Dichloroethane Revealed by 16S rDNA Pyrosequencing and dhIA qPCR. *Environmental Science & Technology*, 47(23), 13668-13676. <a href="http://dx.doi.org/10.1021/es403292s">[More Information]</a>

Dingsdag, S., Coleman, N. (2013). Bacterial communities on food court tables and cleaning equipment in a shopping mall. *Epidemiology and Infection*, 141(8), 1647-1651. <a href="http://dx.doi.org/10.1017/S0950268812002142">[More Information]</a>

Cheung, S., McCarl, V., Holmes, A., Coleman, N., Rutledge, P. (2013). Substrate range and enantioselectivity of epoxidation reactions mediated by the ethene-oxidising Mycobacterium strain NBB4. *Applied Microbiology and Biotechnology*, 97(3), 1131-1140. <a href="http://dx.doi.org/10.1007/s00253-012-3975-6">[More Information]</a>

### 2012

Crighton, T., Hoile, R., Coleman, N. (2012). Comparison of quantitative PCR and culture-based methods for evaluating dispersal of Bacillus thuringiensis endospores at a bioterrorism hoax crime scene. *Forensic Science International*, 219(1-3), 88-95. <a href="http://dx.doi.org/10.1016/j.forsciint.2011.12.003">[More Information]</a>

Chow, B., Baume, A., Lok, P., Cao, Y., Coleman, N., Ruys, A., Boughton, P. (2012). Development of 3D Antibiotic-Eluting Bioresorbable Scaffold with Attenuating Envelopes. *Journal of Biomimetics, Biomaterials, and Tissue Engineering*, 15, 55-62. <a href="http://dx.doi.org/10.1016/j.jbmt.2012.05.003">[More Information]</a>

href="http://dx.doi.org/10.4028/www.scientific.net/JBBTE.15.55">[More Information]</a>

Coleman, N., Le, N., Ly, M., Ogawa, H., McCarl, V., Wilson, N., Holmes, A. (2012). Hydrocarbon monooxygenase in Mycobacterium: recombinant expression of a member of the ammonia monooxygenase superfamily. *The ISME Journal*, 6(1), 171-182. <a href="http://dx.doi.org/10.1038/ismej.2011.98">[More Information]</a>

## 2011

Le, N., Coleman, N. (2011). Biodegradation of vinyl chloride, cis-dichloroethene and 1,2-dichloroethane in the alkene/alkane-oxidising Mycobacterium strain NBB4. *Biodegradation*, 22(6), 1095-1108. <a href="http://dx.doi.org/10.1007/s10532-011-9466-0">[More Information]</a>

Ly, M., Liew, E., Le, N., Coleman, N. (2011). Construction and evaluation of pMycoFos, a fosmid shuttle vector for Mycobacterium spp. with inducible gene expression and copy number control. *Journal of Microbiological Methods*, 86(3), 320-326. <a href="http://dx.doi.org/10.1016/j.mimet.2011.06.005">[More Information]</a>

Coleman, N., Wilson, N., Barry, K., Brettin, T., Bruce, D., Copeland, A., Dalin, E., Detter, J., del Rio, T., Goodwin, L., et al (2011). Genome sequence of the Ethene-and Vinyl Chloride-Oxidizing Actinomycete Nocardioides sp. Strain JS614. *Journal of Bacteriology*, 193(13), 3399-3400. <a href="http://dx.doi.org/10.1128/JB.05109-11">[More Information]</a>

Gestal, A., Liew, E., Coleman, N. (2011). Natural transformation with synthetic gene cassettes: new tools for integron research and biotechnology. *Microbiology*, 157(2), 3349-3360. <a href="http://dx.doi.org/10.1099/mic.0.051623-0">[More Information]</a>

Coleman, N., Yau, S., Wilson, N., Nolan, L., Migocki, M., Ly, M., Crossett, B., Holmes, A. (2011). Untangling the multiple monooxygenases of Mycobacterium chubuense strain NBB4, a versatile hydrocarbon degrader. *Environmental Microbiology Reports*, 3(3), 297-307. <a href="http://dx.doi.org/10.1111/j.1758-2229.2010.00225.x">[More Information]</a>

Coleman, N., Yau, S., Wilson, N., Nolan, L., Migocki, M., Ly, M., Crossett, B., Holmes, A. (2011). Untangling the multiple monooxygenases of Mycobacterium chubuense strain NBB4, a versatile hydrocarbon degrader. *Environmental Microbiology Reports*, 3(3), 297-307. <a href="http://dx.doi.org/10.1111/j.1758-2229.2010.00225.x">[More Information]</a>

## 2010

Mattes, T., Alexander, A., Coleman, N. (2010). Aerobic Biodegradation of the Chloroethenes: Pathways, Enzymes, Ecology, and Evolution. *FEMS Microbiology Reviews*, 34(4), 445-475. <a href="http://dx.doi.org/10.1111/j.1574-6976.2010.00210.x">[More Information]</a>

Jin, Y., Cheung, S., Coleman, N., Mattes, T. (2010). Association of Missense Mutations in Epoxyalkane Coenzyme M Transferase with Adaptation of Mycobacterium sp. Strain JS623 to Growth on Vinyl Chloride. *Applied and Environmental Microbiology*, 76(11), 3413-3419. <a href="http://dx.doi.org/10.1128/AEM.01320-09">[More Information]</a>

## 2009

Johnston, J., Coleman, N., Denyer, G., Gysbers, V., Hancock, D., Rohrlach, B. (2009). Achieving Collective Excellence in Learning, Teaching and Assessment. *Synergy*, 29, 30-33.

Baume, A., Coleman, N., Boughton, P. (2009). Methods for Achieving Soft Tissue Scaffold Sterility. *Journal of Biomimetics, Biomaterials, and Tissue Engineering*, 4, 59-69. <a href="http://dx.doi.org/10.4028/www.scientific.net/JBBTE.4.59">[More Information]</a>

## 2008

Holmes, A., Coleman, N. (2008). Evolutionary ecology and multidisciplinary approaches to prospecting for monooxygenases as biocatalysts. *Antonie van Leeuwenhoek: international journal of general and molecular microbiology*, 94(1), 75-84. <a href="http://dx.doi.org/10.1007/s10482-008-9227-1">[More Information]</a>

Mattes, T., Alexander, A., Richardson, P., Munk, A., Han, C., Stothard, P., Coleman, N. (2008). The Genome of Polaromonas sp. strain JS666: Insights into the Evolution of a Hydrocarbon- and Xenobiotic-Degrading Bacterium, and Features of Relevance to Biotechnology. *Applied and Environmental Microbiology*, 74(20), 6405-6416. <a href="http://dx.doi.org/10.1128/AEM.00197-08">[More Information]</a>

## 2007

Mattes, T., Coleman, N., Chuang, A., Rogers, A., Spain, J., Gossett, J. (2007). Mechanism controlling the extended lag period associated with vinyl chloride starvation in Nocardioides sp strain JS614. *Archives of Microbiology*, 187(3), 217-226. <a href="http://dx.doi.org/10.1007/s00203-006-0189-2">[More Information]</a>

## 2006

Priestley, J., Coleman, N., Duxbury, T. (2006). Growth rate and nutrient limitation affect the transport of Rhodococcus sp strain DN22 through sand. *Biodegradation*, 17(6), 571-576. <a href="http://dx.doi.org/10.1007/s10532-005-9027-5">[More Information]</a>

Coleman, N., Le, N., Holmes, A. (2006). Soluble di-iron monooxygenase gene diversity in soils, sediments and ethene enrichments. *Environmental Microbiology*, 8(7), 1228-1239. <a href="http://dx.doi.org/10.1111/j.1462-2920.2006.01015.x">[More Information]</a>

## 2005

Mattes, T., Coleman, N., Spain, J., Gossett, J. (2005). Physiological and molecular genetic analyses of vinyl chloride and ethene biodegradation in Nocardioides sp. strain JS614. *Archives of Microbiology*, 183(2), 95-106. <a href="http://dx.doi.org/10.1007/s00203-004-0749-2">[More Information]</a>

Coleman, N., Holmes, A. (2005). The native Pseudomonas stutzeri strain Q chromosomal integron can capture and express cassette-associated genes. *Microbiology*, 151(6), 1853-1864. <a href="http://dx.doi.org/10.1099/mic.0.27854-0">[More Information]</a>

## 2004

Coleman, N., Tetu, S., Wilson, N., Holmes, A. (2004). An unusual integron in Treponema denticola. *Microbiology*, 150(11), 3524-3526. <a href="http://dx.doi.org/10.1099/mic.0.27569-0">[More Information]</a>

## 2002

Coleman, N., Spain, J., Duxbury, T. (2002). Evidence that RDX biodegradation by *Rhodococcus* strain DN22 is plasmid-borne and involves a cytochrome p-450. *Journal of Applied Microbiology*, 93(3), 463-472. <a href="http://dx.doi.org/10.1046/j.1365-2672.2002.01713.x">[More Information]</a>