# **Chakkiath Paul Antony**

### **Current position & affiliation:**

Staff Research Scientist
Red Sea Research Center
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### **Permanent address:**

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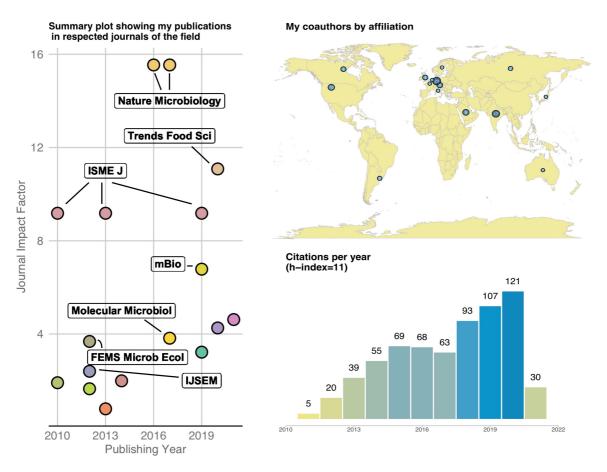
#### **Education**

**2013** Ph. D. Biotechnology- National Centre for Cell Science (NCCS), University of Pune, India **2005-2007** M. Sc. Biotechnology- Cochin University of Science & Technology, India (First class with distinction)

**2002-2005** B. Sc. Biotechnology- Periyar University, India (First class)

1989-2002 Indian School Salalah, Sultanate of Oman

## **Publications Graphical Overview**



# Publications List (Dhttps://orcid.org/0000-0003-1462-7413)

- Hala, S., <u>Antony, C.P.</u>, Momin, A.A., Alshehri, M., Ben-Rached, F., Al-Ahmadi, G., Zakri, S., Baadhaim, M., Alsaedi, A., Thaqafi, O.A.A., Arold, S.T., Al-Amri, A., Pain, A. (2021) Co-occurrence of *mcr-1* and *mcr-8* genes in multi-drug-resistant *Klebsiella pneumoniae* from a 2015 clinical isolate. *Int J Antimicrob Agents* 57: 106303
- Singh, B., Mal, G., Sharma, D., Sharma, R., <u>Antony, C.P.</u>, Kalra, R.S. (2020) Gastrointestinal biotransformation of phytochemicals: Towards futuristic dietary therapeutics and functional foods. *Trends Food Sci & Technol* 106: 64-77
- Hala, S.<sup>†</sup>, **Antony, C.P.**<sup>†</sup>, Guan, Q., Alshehri, M., Alsaedi, A., Alsharief, A., Al-Amri, A., Pain, A. (2020) Crohn's disease patient infected with multiple co-occurring nontuberculous mycobacteria. *Inflamm Bowel Dis* e65–e67 (\*Equal first authorship)
- Hala, S., <u>Antony, C.P.</u>, Alshehri, M., Althaqafi, A.O., Alsaedi, A., Mufti, A., Kaaki, M., Alhaj-Hussein, B.T., Zowawi, H.M., Al-Amri, A., Pain, A. (2019) First report of *Klebsiella quasipneumoniae* harboring blaKPC-2 in Saudi Arabia. *Antimicrob Resist & Infect Cont* 8: 203
- Rubin-Blum, M., <u>Antony, C.P.</u>, Sayavedra, L., Martinez-Perez, L., Birgel, D., Peckmann, J., Wu, Y-C, Cardenas, P., MacDonald, I., Marcon, Y., Sahling, H., Hentschel, U., Dubilier, N. (2019) Fueled by methane: Deep-sea sponges from asphalt seeps gain their nutrition from methane-oxidizing symbionts. *ISME J* 13: 1209-1225.
- Seah, B.K.B., <u>Antony, C.P.</u>, Huettel, B., Zarzycki, J., von Borzyskowski, L.S., Erb, T., Liebeke, M., Dubilier, N., Gruber-Vodicka, H.R. (2019) Sulfur-oxidizing symbionts of Kentrophoros lack canonical genes for autotrophic CO2 fixation. *mBio* 10: e01112-19.
- Rubin-Blum, M., <u>Antony, C.P.</u>, Borowski, C., Sayavedra, L., Pape, T., Sahling, H., Bohrmann, G., Dubilier, N. (2017) Short-chain alkanes fuel the metabolism of mussel and sponge *Cycloclasticus* symbionts from deep-sea gas and oil seeps. *Nature Microbiol* 2: 17093.
- Petersen, J.M., Kemper, A., Gruber-Vodicka, Cardini, U.H., Van der Geest, M., Bulgheresi, S., Mussmann, M., Seah, B.K., <u>Antony, C.P.</u>, Herbold, C., Belitz, A., Weber, M. (2016) Chemosynthetic sulphur-oxidizing symbionts of marine invertebrate animals are capable of nitrogen fixation. *Nature Microbiol* 2: 16195.
- Tavormina, P.L., Kellermann, M.Y., <u>Antony, C.P.</u>, Tocheva, E., Dalleska, N., Chen, S., Magyar, P., Valentine, D.L., Hinrichs, K-U., Jensen, G., Dubilier, N., Orphan, V.J. (2017) Starvation and recovery in the deep-sea methanotroph *Methyloprofundus sedimenti*. *Mol Microbiol* 103: 242-252.
- **Antony, C.P.**<sup>+</sup>, Shimpi,G.G.<sup>+</sup>,Cockell,C.S., Patole,M.S., Shouche,Y.S. (2014) Molecular characterization of prokaryotic diversity associated with Lonar crater basalts. *Geomicrobiol J* 31: 519-528. (\*Equal first authorship)

**Antony, C.P.,** Kumaresan, D., Hunger, S., Drake, H.L., Murrell, J.C., Shouche, Y.S. (2013) Microbiology of Lonar Lake and other soda lakes. *ISME J* 7: 468-476.

Shetty, S.<sup>+</sup>, Marathe, N.<sup>+</sup>, Munot, H.<sup>+</sup>, <u>Antony, C.P.</u><sup>+</sup>, Dhotre, D.P., Murrell, J.C., Shouche, Y.S. (2013) Draft genome sequence of *Methylophaga lonarensis* MPL, a haloalkaliphilic (nonmethane-utilizing) methylotroph. *Genome Ann* 1(3): e202-13. (\*Equal first authorship)

**Antony, C.P.**, Murrell, J.C., Shouche, Y.S. (2012) Molecular diversity of methanogens and identification of *Methanolobus* sp. as active methylotrophic *Archaea* in Lonar crater lake sediments. *FEMS Microbiol Ecol* 81: 43-51.

**Antony, C.P.**<sup>†</sup>, Doronina, N.V.<sup>†</sup>, Boden, R., Trotsenko, Y.A., Shouche, Y.S., Murrell, J.C. (2012) *Methylophaga lonarensis* sp. nov., a moderately haloalkaliphilic methylotroph isolated from the soda lake sediments of a meteorite impact crater. *Int J Syst Evol Microbiol* 62: 1613-1618. (†Equal first authorship)

Antony, C.P., Cockell, C.S., Shouche, Y.S. (2012) Life in (and on) the rocks. J Biosci 37: 1-9.

**Antony, C.P.**, Kumaresan, D., Ferrando, L., Boden, R., Moussard, H., Scavino, A.F., Shouche, Y.S., Murrell, J.C. (2010) Active methylotrophs in the sediments of Lonar Lake, a saline and alkaline ecosystem formed by meteor impact. *ISME J* 4: 1470-1480.

Surakasi, V.P.<sup>†</sup>, <u>Antony, C.P.</u><sup>†</sup>, Sharma, S., Patole, M.S., Shouche, Y.S. (2010) Temporal bacterial diversity and detection of putative methanotrophs in surface mats of Lonar crater lake. *J Basic Microbiol* 50: 465-474. (†Equal first authorship)

#### Honors, Awards & Achievements

- ISME Early-Mid Career Ambassadorship (2019-2022)
- NASA Postdoctoral Program (NPP) Reviewer (2017-present)
- Max Planck Society (MPG) Postdoctoral Fellowship, MPIMM (2015-2016)
- Alexander von Humboldt Postdoctoral Fellowship, Humboldt Foundation (2013-2015)
- Visiting Researcher, California Institute of Technology (CALTECH), July, 2015
- Max Planck Society (MPG) Visiting Research Fellowship, MPIMM (2013)
- Junior & Senior Research Fellowships, Indian Council of Medical Research (ICMR), Government of India (2008, 2010)
- UKIERI Research Fellowship, British Council (during visits to the UK between 2008-2010)
- Visiting Research Fellowship, National Centre for Biological Sciences-Tata Institute for Fundamental Research (2007)
- 7th rank holder in National-level Post Graduate Entrance Examination, Cochin University of Science & Technology (2005)
- 'Best Personality of the College' Award (during B.Sc.), Muthayammal College of Arts &

Science (2002-2005)

• Academic Topper Award (during B. Sc.), Muthayammal College of Arts & Science (2002-2004)

### **Research Experience**

**Staff Research Scientist,** Red Sea Research Center, BESE Division, KAUST, Thuwal, Saudi Arabia (2019-present)

**Postdoctoral Research,** Pathogen Genomics Laboratory, BESE Division, KAUST, Thuwal, Saudi Arabia (2017-2018)

*Project*: Diagnostic meta'omics' and use of 'omics' approaches for pathogen discovery *Supervisor*: Prof. Dr. Arnab Pain

**Postdoctoral Research,** Department of Symbiosis, Max Planck Institute for Marine Microbiology, Bremen, Germany (2013-2016)

*Project*: 'Omics' analyses of endosymbionts of invertebrates at hydrocarbon seeps and hydrothermal vents

Supervisor: Prof. Dr. Nicole Dubilier

**Ph.D. Research,** National Centre for Cell Science (NCCS), Pune, India & University of Warwick, Coventry, UK (2008-2013)

*Project*: Methanotrophy and associated microflora in Lonar Lake, a meteor impact crater *Supervisor*: Dr. Milind S. Patole; *UKIERI collaborator/co-PI*: Prof. Dr. J. Colin Murrell

**Visiting Researcher Scheme,** National Centre for Biological Sciences (NCBS), Bangalore, India (2007)

*Project*: Understanding the neural correlates of olfactory behavior in *Drosophila Supervisor*: Prof. Dr. Obaid Siddiqi, FRS

**M.Sc. Research,** National Institute for Cholera & Enteric Diseases (NICED), Kolkata, India (2006-2007)

*Project*: Characterization of antimicrobial resistance genes among non-typhoidal *Salmonella* strains

*Supervisor*: Dr. T. Ramamurthy

**B.Sc. Research**, Muthayammal College of Arts & Sciences, Rasipuram, India (2005) *Project*: Analysis of *Agrobacterium* biodiversity in South India *Supervisor*: Multiple faculties at college

#### **Posters at Conferences**

Antony, C.P., Gruber-Vodicka, H., Sayavedra, L., Dubilier, N. (2015). Insights into methanotrophic and thiotrophic symbiont genomes of deep-sea mussels and snails. Gordon Research Conference (GRC), Applied & Environmental Microbiology, South Hadley, MA.

**Antony, C.P.**, Hunger, S., Kumaresan, D., Drake, H.L., Murrell, J.C., Shouche Y.S. (2009) Molecular identification of putative methylotrophs in Lonar crater lake. 50th Association of

Microbiologists of India (AMI) Conference, Pune.

## Personal profile

Gender: Male

Nationality: Indian

Marital status: Married

Languages known: English, Malayalam, Hindi, Tamil (only speak), Arabic & German(basic)

#### References

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