【原著論文】

＜A02 班＞

池田 治生

1. Doi, S., Komatsu, M., Ikeda, H. : Modifications to central carbon metabolism in an engineered *Streptomyces* host to enhance secondary metabolite production. ***J. Biosci. Bioeng****., 130*, 563-570 (2020).
2. Hashimoto, T., Kozone, I., Hashimoto, J., Suenaga, H., Fujie, M., Satoh, N., Ikeda, H., Shin-Ya, K. : Identification, cloning and heterologous expression of biosynthetic gene cluster for desertomycin. ***J. Antibiot****., 73*, 650-654 (2020)
3. Kudo, K., Hashimoto, T., Hashimoto, J., Kozone, I., Kagaya, N., Ueoka, R., Nishimura, T., Komatsu, M., Suenaga, H., Ikeda, H., Shin-Ya, K. : In vitro Cas9-assisted editing of modular polyketide synthase genes to produce desired natural product derivatives. ***Nat. Commun.****, 11*, 4022 (2020).
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5. Hashimoto, T., Kozone, I., Hashimoto, J., Ueoka, R., Kagaya, N., Fujie, M., Sato, N., Ikeda, H., Shin-ya, K. : Novel macrolactam compound produced by the heterologous expression of a large cryptic biosynthetic gene cluster of *Streptomyces rochei* IFO12908. ***J. Antibiot****. 73*, 171-174 (2020).
6. Demachi, A., Uchida, R., Arima, S., Nagamitsu, T., Hashimoto, J., Komatsu, M., Kozone, I., Shin-ya, K., Tomoda, H., Ikeda, H. : An unusual extender unit is incorporated into the modular polyketide synthase of scopranones biosynthesis. ***Biochemistry*** *58*, 5066-5073 (2019).
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11. Matsuda, K., Kobayashi, M., Kuranaga, T., Takada, K., Ikeda, H., Matsunaga, S., Wakimoto, T. : SurE is a: Trans -acting thioesterase cyclizing two distinct non-ribosomal peptides. ***Org. Biomol. Chem****., 17*, 1058 (2019).
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22. Amagai, K., Ikeda, H., Hashimoto, J., Kozone, I., Izumikawa, M., Kudo, F., Eguchi, T., Nakamura, T., Osada, H., Takahashi, S., Shin-ya, K., "Identification of a gene cluster for telomestatin biosynthesis and heterologous expression using a specific promoter in a clean host". ***Sci. Rep***., *7*, 3382 (2017)
23. Pait, IGU., Kitani, S., Kumiawan, YN., Asa, M., Iwau, T., Ikeda, H. Nihira, T., "Identification and characterization of *lbpA*, an indigoidine biosynthetic gene in the γ-butyrolactone signaling system of *Streptomyces lavendulae* FRI-5", ***J. Biosci. Bioeng.*** *124*, 369-375 (2017)
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36. Yamada, Y., Komatsu, M., Ikeda, H., “Chemical diversity of labdane-type bicyclic diterpene biosynthesis in Actinomycetales microorganisms”, ***J. Antibiot.*** *69*, 515-523 (2016).

【総説・解説】

＜A02 班＞

池田 治生

1. Ikeda, H. : Natural products discovery from micro-organisms in the post-genome era. ***Biosci. Biotechnol. Biochem***., *81*, 13-22 (2017).
2.

【著書】

＜A02 班＞

池田 治生

無し

【招待講演】

＜A02 班＞

池田 治生

1. 2019/05/25 科学研究費補助金 新学術領域研究（研究領域提案型）生物合成系の再設計による複雑骨格機能分子の革新的創成科学、第６回公開シンポジウム、北海道大学、札幌、「非天然型 RiPPs 化合物の新たな創製法および生成量の改善」
2. 2019/6/24 第 19 回蛋白質科学会・第 71 回日本細胞生物学会合同年次会、神戸国際会議場、神戸、「放線菌のⅠ型ポリケチドおよび非リボソームペプチド合成酵素の翻訳後修飾に関する包括的解析」
3. 2019/9/18 第 71 回日本生物工学会大会、岡山大学、岡山、「放線菌の特異な接合伝達と染色体移動」
4. 2018/05/26 科学研究費補助金 新学術領域研究（研究領域提案型）生物合成系の再設計による複雑骨格機能分子の革新的創成科学、第４回公開シンポジウム、北海道大学、札幌、「代謝工学的な改変による物質生産への影響」
5. 2017/08/05 科学研究費補助金 新学術領域研究（研究領域提案型）生物合成系の再設計による複雑骨格機能分子の革新的創成科学、第２回公開シンポジウム、北海道大学、札幌、「Type-I PKS および NRPS の翻訳後修飾に関する包括的解析」
6. 2017/05/25 18th International Symposium on the Biology of Actinomycetes, **Plenary lecture**, “Genome structure of avermectin producer *Streptomyces avermitilis* and applications in synthetic biology of secondary metabolism”, Jeju, Korea, May 23-27, 2017
7. 2016/07/26 2016 SIMB Annual Meeting and Exhibition, “Chemical diversity of labfane-type bicyclic diterpene biosynthesis in *Streptomyces*”, New Orleans, USA, July 24-29, 2016

【特許等の出願状況】
＜A02 班＞
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　無し

【報道記事】
＜A02 班＞
池田 治生
無し

【受賞、表彰等】
＜A02 班＞
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1. Y, Yamada, Arima, S., Nagamitsu, T., Johmoto, K., Uekusa, H., Eguchi, T., Shin-ya, K., Cana, D.E., Ikeda, H. : “Novel terpenes generated by heterologous expression of bacterial terpene synthase genes in an engineered *Streptomyces* host” The Journal of Antibiotics Omura Award, 2019/12/1