

## 遺伝子科学研究開発部

### 概要

遺伝子科学研究開発部では、重点研究を推進するために、平成 17 年度より遺伝子科学研究開発プロジェクトを募集し、採択された課題を平成 16 年度に設置した遺伝子組換え動植物の飼育・培養設備（遺伝子実験施設 2 階）で実施している。第 1 期は平成 17 年度～平成 19 年度、第 2 期は平成 20 年度～22 年度、第 3 期は平成 23 年度～25 年度、第 4 期は平成 26 年度～28 年度で、本年度より第 5 期を 3 年間で実施している。第 5 期では、植物が 5 テーマ、動物（小型魚類に加え水産生物の受入）が 3 テーマで、所属部局は、理学研究科（4）、先端物質科学研究科（1）、生物圏科学研究科（1）、総合科学研究科（1）、自然科学研究支援開発センター（1）を重点支援した。なお、植物の研究テーマが 5 テーマで、さらにいくつかの問い合わせもあることから、栽培設備の拡張の必要性に迫られている。

第 5 期のプロジェクト研究は以下の通りである。

分類	研究テーマ名	所属部局等	研究代表者（職）
植物	植物の生存戦略解明と機能開発	理学研究科	坂本 敦（教授）
	植物の葉老化制御機構の分子遺伝学的解析	理学研究科	草場 信（教授）
	高等植物の細胞機能に関する研究	先端物質科学研究科	藤江 誠（准教授）
	遺伝子組換えによる高ストレス耐性植物の作出に関する研究	生物圏科学研究科	江坂宗春（教授）
	外来異種遺伝子導入による植物の機能変化の研究	自然科学研究支援開発センター	田中伸和（教授）
動物	アリールスルファターゼ(Ars)の機能解析	理学研究科	中坪敬子（助教）
	再生組織・器官の大きさを制御するメカニズムの解明	理学研究科	菊池 裕（教授）
	無腸動物の飼育方法の開発と、発生学的、進化的研究	総合科学研究科	彦坂 暁（准教授）

## 【遺伝子実験部門利用申請者の研究業績】

### 総合科学研究科

Tanaka M, Ishihara Y, Mizuno S, Ishida A, Vogel CF, Tsuji M, Yamazaki T and Itoh K  
Progression of vasogenic edema induced by activated microglia under permanent middle cerebral artery occlusion.

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Ishida A, Sueyoshi N and Kameshita I

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Tanaka M, Ishihara Y, Mizuno S, Ishida A, Vogel CF, Tsuji M, Yamazaki T and Itoh K  
Progression of vasogenic edema induced by activated microglia under permanent middle cerebral artery occlusion.

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Shikano K, Bessho Y, Kato M, Iwakoshi-Ukena E, Taniuchi S, Furumitsu M, Tachibana T, Bentley GE, Kriegsfeld LJ and Ukena K

Localization and function of neurosecretory protein GM, a novel small secretory protein, in the chicken hypothalamus.

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Ukena K

Avian and murine neurosecretory protein GL participates in the regulation of feeding and energy metabolism.

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#### 教育学研究科

Narahara-Nakano Y, Nakano T and Tomikawa K

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#### 理学研究科

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自然科学研究支援開発センター

Kitamura K and Kinsui EZB

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