Systems Biology and Bioinformatics

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Ëéí§»¯ÔºÑµÔ¡ÒÃÇÔ¨ÑÂªÕÇÇÔ·ÂÒÃÐºáÅÐªÕÇÊÒÃÊ¹à·È ÁËÒÇÔ·ÂÒÅÑÂà·¤â¹âÅÂÔ¾ÃÐ¨ÍÁà¡ÅéÒ¸¹ºØÃÕ à»ç¼¼ÙéºØ¡à
áÅÐÇÔÈÇ¡ÃÃÁàÁµÒâºÅÔ¤ (metabolic engineering) ¡ÅØèÁÇÔ¨ÑÂÁÕ¤ÇÒÁÃèÇÁÁ×Í¡ÑºÊ¶Ò°Ñ¹µèÒ§æ ·ÕèÁÕ¾×é¹°Ò¹¤ÇÒÁÃ
·ÓãËé¡ÅØèÁÇÔ¨ÑÂÁÕ¤ÇÒÁÊÒÁÒÃ¶ã¹¡ÒÃ¾Ñ²¹Òà·¤¹Ô¤ÇÔ¸Õ¡ÒÃà¾×èÍà¢éÒã¨ÊÔè§ÁÕªÕÇÔµ¨Ò¡¢éÍÁÙÅ¨Õâ¹Á (genome)

¡ÒÃÇÔ¨ÑÂ¢Í§ËéÍ§»¯ÔºÑµÔ¡ÒÃªÕÇÇÔ·ÂÒÃÐºáÅÐªÕÇÊÒÃÊ¹à·È à¹é¹¡ÒÃÇÔà¤ÃÒÐËìàªÔ§ÃÐºº¢Í§ ÇÔÈÇ¡ÃÃÁàÁµÒâºÅÔ¤
ÁÑ¹ÊÓ»ÐËÅÑ§ (Cassava) ¾ÅÒÊâÁà´ÕÂÁ (Plasmodium) àª×éÍÇÑ³âÃ¤ (Tuberculosis) áÅÐÊÒËÃèÒÂÊä»ÃÙÅÔ¹Ò (Spiruli
à¾×èÍà¢éÒã¨ªÕÇÇÔ·ÂÒàªÔ§ÃÐºº¢Í§ÊÔè§ÁÕªÕÇÔµàËÅèÒ¹Õé «Öè§¨Ð¹Óä»ÊÙè¡ÒÃ»ÃÑº»ØÃ§ÊÒÂ¾Ñ¹¸Øì áÅÐ¡ÒÃËÒà»éÒ
à¤Ã×èÍ§Á×ÍáÅÐâ»Ãá¡ÃÁ´éÒ¹ªÕÇÊÒÃÊ¹à·È áÅÐ°Ò¹¢éÍÁÙÅµèÒ§æ ¾ÃéÍÁ¡Ñº¡ÒÃÈÖ¡ÉÒ´éÒ¹ªÕÇâÁàÅ¡ØÅáÅÐ¡ÒÃËÁÑ¡ã¹Ëéí§
Ëéí§»¯ÔºÑµÔ¡ÒÃªÕÇÇÔ·ÂÒÃÐºáÅÐªÕÇÊÒÃÊ¹à·ÈÊÒÁÒÃ¶¾Ñ²¹Òáºº¨ÓÅÍ§·Ò§¤³ÔµÈÒÊµÃì áÅÐ¨ÓÅÍ§¾ÄµÔ¡ÃÃÁ¢Í§à«ÅÌ
áÅÐ¡ÒÃà»ÅÕèÂ¹á»Å§´éÒ¹ÂÕ¹º¹¤ÍÁ¾ÔÇàµÍÃì ¤Çº¤Ùè¡Ñº¡ÒÃà»ÃÕÂºà·ÕÂº¼Å¡ÒÃ·´ÅÍ§ã¹Ëéí§»¯ÔºÑµÔ¡ÒÃ

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- à¾×èÍ¾Ñ²¹Ò·Ñ¡ÉÐ¤ÇÒÁÃÙé¾×é¹°Ò¹´éÒ¹ªÕÇÇÔ·ÂÒÃÐºáÅÐªÕÇÊÒÃÊ¹à·È

- à¾×èÍ»ÃÐÂØ¡µìãªéà¤Ã×èÍ§Á×Í´éÒ¹ªÕÇÇÔ·ÂÒÃÐºáÅÐªÕÇÊÒÃÊ¹à·Èã¹¡ÒÃ¾Ñ²¹Òà·¤â¹âÅÂÔªÕÇÀÒ¾ã¹»ÃÐà·Èä·Â

- à¾×èÍ¾Ñ²¹ÒáÅÐÊ¹ÑºÊ¹Ø¹·ÃÑ¾ÂÒ¡ÃºØ¤¤Åã¹´éÒ¹ªÕÇÇÔ·ÂÒÃÐºáÅÐªÕÇÊÒÃÊ¹à·È

§Ò¹ÇÔ¨ÑÂáÅÐ¾Ñ²¹Ò·Õè´Óà¹Ô¹¡ÒÃ

- ¡ÒÃÈÖ¡ÉÒªÕÇÇÔ·ÂÒàªÔ§ÃÐºº¢Í§¡ÃÐºÇ¹¡ÒÃÊÃéÒ§ÅÔ»Ô´ª¹Ô´µèÒ§æ ã¹ÂÕÊµì

- ¡ÒÃÈÖ¡ÉÒªÕÇÇÔ·ÂÒÃÐºº¾×èÍ»ÃÑº»ØÃ§»ÃÔÁÒ³áÅÐ¤Ø³ÀÒ¾¢Í§á»é§¨Ò¡µé¹ÁÑ¹ÊÓ»ÐËÅÑ§ (Cassava)

- ¡ÒÃÈÖ¡ÉÒËÒÓ´ÑºàºÊ´ÕàÍç¹àÍ¢Í§ÊÒËÃèÒÂÊä»ÃÙÅÔ¹Ò (Spirulina)

- ¡ÒÃÇÔà¤ÃÒÐËì¢éÍÁÙÅ¢Í§âÃ¤àºÒËÇÒ¹ âÃ¤¡ÃÐ´Ù¡¾ÃØ¹

à·¤â¹âÅÂÔ·Õè¾Ñ²¹Ò

- High Throughput Technology

- ¡ÒÃÇÔà¤ÃÒÐËìâ»ÃµÕ¹

- ¡ÒÃÇÔà¤ÃÒÐËì àÁµÒºÍäÅµì

- ¡ÒÃÇÔà¤ÃÒÐËìÍÒÃìàÍç¹àÍ

- ¡ÒÃÇÔà¤ÃÒÐËì Protein/DNA –protein interaction

- à·¤¹Ô¤¡ÒÃÊÃéÒ§áºº¨ÓÅÍ§áÅÐÇÔà¤ÃÒÐËì¢éÍÁÙÅ

- à·¤¹Ô¤¡ÒÃÇÔ¤ÃÒÐËì¢éÍÁÙÅËÅÒÂÃÐ´Ñº

- à·¤¹Ô¤¡ÒÃÊÃéÒ§âÁà´Åâ¤Ã§¢èÒÂ

- à·¤¹Ô¤¡ÒÃÊÃéÒ§áºº¨ÓÅÍ§áÅÐ¡ÒÃ¨ÓÅÍ§¾ÄµÔ¡ÃÃÁ¢Í§à«ÅÅì

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- ¹ÒÂàµÇÔª ÇÃ»ÃÕ´Ò

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- Technical University of Denmark (DTU)

- University of Queensland (Australia)

- Kazusa DNA Research Institute (KDRI), Japan

- RIKEN, Japan

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- ÈÙ¹Âì¾Ñ¹¸ØÇÔÈÇ¡ÃÃÁáÅÐà·¤â¹âÅÂÔªÕÇÀÒ¾áËè§ªÒµÔ

- ÈÙ¹Âìà·¤â¹âÅÂÔÕÍÔàÅç¡·ÃÍ¹Ô¡ÊìáÅÐ¤ÍÁ¾ÔÇàµÍÃìáËè§ªÒµÔ

- ÈÙ¹Âìà·¤â¹âÅÂÔõâÅËÐáÅÐÇÑÊ´ØáËè§ªÒµÔ

- ÈÙ¹Âì¹Òâ¹à·¤â¹âÅÂÔõáËè§ªÒµÔ

- ÁËÒÇÔ·ÂÒÅÑÂàªÕÂ§ãËÁè

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- ¨ØÌÒÅ§¡Ã³ìÁËÒÇÔ·ÂÒÅÑÂ

- ÁËÒÇÔ·ÂÒÅÑÂÁËÔ´Å

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