



Autism Social Difficulties Linked to Specific Gene

Description

Scientists have found out more about the genes that control social behaviour. They have particularly studied the gene GTF2I. This gene is important for people with Williams' syndrome, who tend to be very social. Some people have the opposite genetic change and this typically results in autism and difficulties socialising.

In the study, scientists used special stem cells to create tiny versions of human brains. These were missing the GTF2I gene. As a result, this made clear that the gene was necessary for normal social behaviour. Researchers saw that the absence of the GTF2I led to increased cell death, and problems with connections between brain cells.

By understanding the importance of this gene, it may be possible to create treatments. These could improve social activities for people with problems like autism. For example, it might be possible to increase or decrease the action of GTF2I. Such treatments could make socialising easier for people with autism.

Understanding the action of this gene also helps us to appreciate how humans have evolved to become social animals. Humans are naturally sociable and are able to collaborate and cooperate. This has led to many important achievements. By studying the GTF2I gene, we can gain a better understanding of how this works.

Overall, this study helps to explain why some people are more social than others and it offers the possibility of finding ways to help those who find socialising more difficult. It's an important step in understanding how our brains manage social behaviour.

Vocabulary List:

1. **Genes** // (noun): Units of heredity that are passed down from parents to offspring and determine traits.
2. **Social behaviour** // (noun): Actions and interactions between individuals within a group or society.
3. **Syndrome** // (noun): A group of symptoms or traits that occur together and indicate a particular condition or disorder.
4. **Autism** // (noun): A developmental disorder characterized by difficulties in social interaction and communication.
5. **Stem cells** // (noun): Undifferentiated cells that have the ability to develop into different cell types.
6. **Collaborate** // (verb): To work together with others to achieve a common goal.

Vocabulary quizzes



Multiple Choice (Select the Correct answer for each question.)

1. What is the term used to describe being ready for a potential emergency?
Option: Resources
Option: Congested
Option: Diversions
Option: Preparedness
2. What term is used to indicate the release of something like a patient from a hospital?
Option: Standby
Option: Discharge
Option: Hopeful
Option: Impressive
3. Which condition is characterized by challenges with social skills and repetitive behaviors?
Option: Thrived
Option: Unfavourable
Option: Autism
Option: Abundant
4. Which type of cells have the potential to develop into many different cell types in the body?
Option: Looter-shooter
Option: Genes
Option: Stem cells
Option: Social behaviour
5. What term describes something that brings about significant change or innovation?
Option: Syndrome
Option: Innovative
Option: Revolutionary
Option: Avant-garde
6. Which term describes something that is clear and easily understood?
Option: Transparent
Option: Augmented reality
Option: Groundbreaking
Option: Equinox
7. What is half of the Earth divided either north-south or east-west?
Option: Vernal
Option: Hemisphere
Option: Aries



Option: Babylonian

8. What term refers to a group of stars forming a recognizable pattern that is traditionally named after its apparent form or identified with a mythological figure?

- Option: Constellation
- Option: Collaborate
- Option: Innovative
- Option: Revolutionary

9. Which word describes an area that is overcrowded or full of traffic?

- Option: Transparent
- Option: Augmented reality
- Option: Congested
- Option: Groundbreaking

10. What term describes feeling or inspiring optimism for the future?

- Option: Revolutionary
- Option: Innovative
- Option: Hopeful
- Option: Avant-garde

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. During the disaster the lack of _____ posed a significant challenge for the relief efforts.

12. The emergency response team was on _____ ready to deploy at a moment's notice.

13. Despite the difficult circumstances the community _____ and supported one another.

14. The company took an _____ approach to product development leading to unique solutions in the market.

15. The mobile app uses _____ to overlay digital information onto the real world.

16. The _____ is the time of year when day and night are of equal length.

17. People born between March 21 and April 19 fall under the zodiac sign of _____.

18. The ancient _____ civilization made significant contributions to mathematics and



astronomy.

19. Your _____ play a big role in determining your physical characteristics.

20. The artist was known for his _____ style pushing the boundaries of traditional art.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. The garden was filled with a variety of colorful flowers and lush vegetation.
22. The scientist studied the makeup of the rare species to understand its uniqueness.
23. Anthropologists observe primates to learn more about their complex interactions and group dynamics.
24. The new video game combines elements of fast-paced action and strategic gameplay.
25. The invention transformed the industry by introducing a completely new approach to production.
26. The research findings opened up new possibilities and avenues for exploration in the field.
27. The company's policy on data privacy was clear and easily understandable to all users.
28. Despite the challenges the team remained optimistic about reaching their goal.
29. During the road construction alternative routes were provided to redirect traffic.
30. The medical condition is characterized by a specific set of symptoms that often occur together.

Answer

Multiple Choice: 1. Preparedness 2. Discharge 3. Autism 4. Stem cells 5. Revolutionary 6. Transparent 7. Hemisphere 8. Constellation 9. Congested 10. Hopeful

Gap-Fill: 11. resources 12. standby 13. thrived 14. innovative 15. augmented reality 16. equinox 17. Aries 18. Babylonian 19. genes 20. avant-garde

Matching sentence: 1. abundant 2. genetic 3. social behaviour 4. looter-shooter 5. revolutionary 6. groundbreaking 7. transparent 8. hopeful 9. diversions 10. syndrome

CATEGORY

1. Sci/Tech - LEVEL3

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