Case Study: Match Each Patient to a Neurotransmitter (Norepinephrine, Serotonin, Dopamine)

Gail Brown is a 68-year-old female. She is a retired farmer who lives at home alone with her dog. Mrs. Brown's husband passed away 5 years ago. She experienced a minor fall (~3 months ago) after tripping over her dog and landed on an outstretched right hand, leading to wrist pain. She saw her family doctor regarding her wrist, but also complained of some recent trouble with balance and a small hand tremor. She was referred to a neurologist and diagnosed with early-stage idiopathic Parkinson’s Disease. She received a referral for physiotherapy to perform a falls risk assessment, maintain her functional status, and address her concerns regarding the condition.

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James is a 42-year-old male who owns his own construction company. He works in both the office as well as on site helping with his crew. 3 months ago, James began developing lower back pain. He reports that it has become constant and has made his job increasingly difficult. To control the pain, he has been taking frequent breaks during the workday to lie down in his truck but feels that his crew is judging him for not pushing through the pain. He also reports that his pain has been preventing him from sleeping, which has been affecting his ability to run his company. He was hoping that the pain would resolve on its own but recently he has felt that he should “just give up” on trying to get better. He is starting to find that he is always tired and reports that he “kind of doesn’t care if the business fails” because he believes working is the reason he is in pain. After a friend recommended him to PT, he decided that he would try anything to make the pain go away but he is unsure of how exercise will help him. James currently smokes half a pack of cigarettes a day and has no outstanding past medical history.

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J.D. is an 8-year-old boy who is afraid of heights. J.D. is in grade 3 and can participate fully in school and all activities that he enjoys. He enjoys building Star Wars Lego sets and playing with them. J.D. was playing at recess when his friends all sat on top of the monkey bars and invited him to join. As he climbed the ladder, he started to feel hot and nervous. As soon as he gets to the top, he freezes and is unable to move.

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Explain Why:

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