

# THE PLEXUS

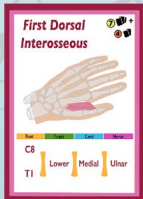
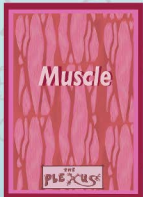


by  
Zach London,  
MD

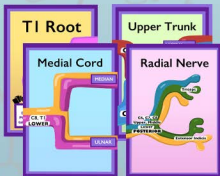
Art by  
Abigail  
Seguin

**A strategy card about neuroanatomy  
for 2-3 players.**

Contents:  
30 Muscle Cards (*back and front*)



54 Innervation Cards (*back and front*)



Roots, Trunks, Cords, and Nerves can be distinguished by their background colors.

Reading is good, but watching a video is easier!

Find our instructional video at:

[www.ThePlexusGame.com](http://www.ThePlexusGame.com)

In *The Plexus*, players try to connect roots, trunks, cords, and nerves to each other to innervate the most (and best) muscles and score the most points.

Setup:

- First, shuffle the Innervation Cards. Deal five face-down to each player and place the rest in a face-down pile to form the Innervation Draw Pile.

- Then, shuffle the Muscle Cards. Place three face-up in the center of the table to be the Shared Muscle Cards.

- Next, deal one Muscle Card face-down to each player to keep hidden in their hand.

This is their Secret Muscle Card.

- Finally, place the rest of the Muscle Cards in a face-down pile - the Muscle Draw Pile.

## Game Setup



## Secret Muscle Card

## Player 1's hand (secret)



## Shared Muscle Cards



## Muscle Draw Pile



## Innervation Draw Pile

## Player 2's hand

## Secret Muscle Card



## Object:

The object of this game is to gain points by creating and completing nerve pathways, called **Tableaus**, to innervate Muscle Cards.

Generally, the more Innervation Cards each Tableau contains, the more points it is worth when a player innervates the matching Muscle Card (though different Muscle Cards have different point values).

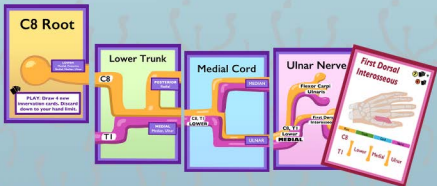
Tableaus containing an entire nerve pathway for an innervated muscle also give players special strategic powers. But players may rack up points quickly by innervating Muscle Cards with partial pathways. Each strategy has its own advantages.

The player who has collected the most points by the end of the game wins.

## Turns:

The player who was most recently unnerved goes first, and play proceeds in a clockwise direction. During a typical turn, a player **DRAWS** one Innervation Card and then **PLAYS** one Innervation Card face up on the table in front of them. Innervation cards can be placed next to each other, connecting them together to build nerve pathways. This is called, “building a Tableau.”

Here’s an example of a complete nerve pathway (or a complete Tableau), and a muscle it innervates:



## **DRAWING an Innervation Card**

There are three options for drawing Innervation cards.

### **1. Draw one card from the Innervation Draw Pile.**

The player takes one card and places it into their hand.

### **2. Steal a Singleton from another player's Tableau.**

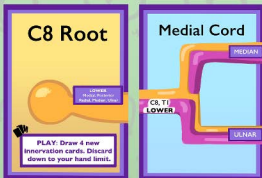
If a player has a single Innervation Card face up on the table in front of them, it is not yet part of a Tableau, and is considered a Singleton. Thus, it may be stolen. Once two or more Innervation Cards are connected in a Tableau, they are no longer eligible to be stolen. A player may only steal another player's Singleton if the stealing player has an incomplete Tableau to which the Singleton may be connected on one end.



An unattached Singleton may be stolen.

If a player steals a cards, they must immediately connect it to one of their own Tableaus. They do not get to play an Innervation Card from their hand, but they may still take any of the Optional Actions described below.

**3. Draw a card from one's own Incomplete Tableau.** A player disconnects one Innervation Card from one of their own incomplete Tableaus and places the card into their hand. There are rare situations in which this move is strategically advantageous.



**Example:** A player with this incomplete Tableau and a Lower Trunk card in their hand chooses to use a turn to draw the C8 Root card back into their hand. This creates an opportunity for them to build this back as a 3-card Tableau later.



## **PLAYING an Innervation Card**

- The player takes one Innervation Card from their hand and plays it onto the table in front of them, either connecting it to another card as part of a Tableau, or playing it by itself, unconnected to others, as a **Singleton**.
- A player may choose to play any Innervation Card as a Singleton, even if it is eligible to connect to another Tableau. There is no limit to the number of Singletons a player may have on the table, but players will want to be careful, because Singletons can be stolen by other players.
- The player may choose to connect their Innervation Card to an eligible Tableau. Each Innervation Card's eligible connections are listed on it.
- Tableaus can be built in any order. You do not need to put a Root Card down first.

- After playing a card, the player draws back up to their hand limit of five from the Innervation Draw Pile.

- **Note for Neurology Nerds:** Innervation cards don't have to be contiguous in the brachial plexus to be connected. For example, if a player has a Lower Trunk card on the table as a Singleton, they may connect a C8 or T1 root card to the left or a Posterior Cord, Medial Cord, or WILD Cord to the right. They may also choose to skip the Cords altogether and directly connect a Radial Nerve, Median Nerve, or Ulnar Nerve to the right. However, if they choose to connect to one of these nerves, they cannot go back later and insert a cord into the middle of the tableau; they would first have to use a turn to take one of the cards back into their hand.



# Sample Connections

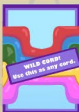
Cards that can be attached to this Lower Trunk card include the following:



On the left:



On the right (any of these):



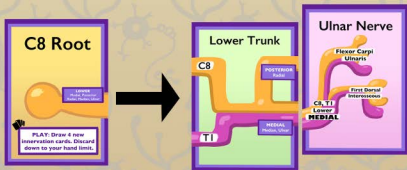
Besides drawing and playing a card, a player may perform any of these additional actions at any point during their turn:

- Connect two incomplete Tableaus to each other; or
- Innervate a Muscle Card; or
- Activate a Root Power.

Now, we'll explain these actions in detail.

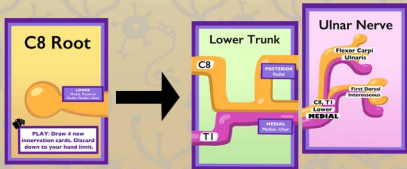
### Connect incomplete Tableaus to each other (*Optional*)

- If a player has two or more incomplete Tableaus that are eligible to be connected, they may connect them:



## Innervate a Muscle Card (Optional)

- Once a Tableau has two or more connected Innervation Cards that supply a Shared Muscle or a Secret Muscle, the player may declare that they are innervating that muscle.
- They then pick up the Shared Muscle Card from the table or reveal the Secret Muscle Card from their hand and set it off to the side.
- The player picks up the cards in the Tableau, shows them to the other players to verify that the innervation is correct, and places the used Innervation Cards in a pile on top of the Muscle Card, so that the name of the muscle and point values are still showing.



- If the **total** number of cards used to innervate the muscle is two or three, the Innervation Cards are placed face-down on top of the Muscle Card.
- If the total number of cards used to innervate the muscle is four (including a contiguous root, trunk, cord, and nerve that all supply the chosen muscle), the pile of innervation cards is placed face-up on the Muscle Card **with the Root Card on top**. This indicates that the Root Power is available to be activated.
- After placing the innervated muscle and cards to the side, the player draws a new Muscle Card to replace the innervated muscle, either onto the table (if the innervated muscle was a Shared Muscle) or into the player's hand (if the innervated muscle was a Secret Muscle).



For example, a player innervates the First Dorsal Interosseous with this Tableau:

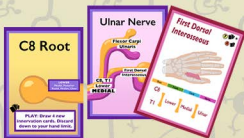


They then cover the First Dorsal Interosseous card like this.

This innervation, made from a completed tableau, is worth 7 points. The player may activate the Root Power at any time.



Alternatively, a player innervates the First Dorsal Interosseous with this Tableau:



They cover the First Dorsal Interosseous card like this.

This is innervation worth 4 points and the player may not activate the Root Power.





## **Activate a Root Power** (*Optional*)

- Every Root Innervation Card (C5, C6, C7, C8 and T1) has a unique power that is immediately available when a player innervates a muscle using a **four-card Tableau**, including that root and the appropriate trunk, cord, and nerve.
- Some Root Powers have the word **ONGOING**, which means that the power is active immediately. These cards remain face-up for the rest of the game.
- Other Root Powers have the word **PLAY**. These have one-time powers that can be activated at any time, even on another player's turn. After a player activates a Root Power and performs the listed action, they then flip their pile of Innervation Cards face-down on top of the Muscle Card, to indicate that the power is no longer available. Again, the cards should be placed so the name of the muscle and point values are still visible.

## **End of Game**

- Once the last Innervation Card is drawn from the draw pile, the following takes place:
  - Play continues in turn order, using all the same rules, except that players may no longer draw new Innervation Cards. On their turn, they may continue to steal eligible Singletons from other players, draw cards from their own Tableaus, play cards, innervate muscles, and activate Root Powers.
  - Newly Innervated Muscle Cards, both Shared and Secret, are still replaced with new Muscle Cards from the Muscle Draw Pile during this phase of the game.
  - There is no limit to the number of turns that can take place once the Innervation Draw Pile is empty, but a player may choose to indicate their final turn by placing their hand of Innervation Cards face down in front of them. Once all players have taken their final turn, the game is over, and the points are counted.

## End of Game Scoring

- Players earn points for each Innervated Muscle Card. The points earned are listed in the top-right-hand corner of each Muscle Card.
- Muscles innervated with two Innervation Cards at the end of the game are worth the lower point value listed on the innervated Muscle Card.
- Muscles innervated with three or four Innervation Cards at the end of the game are worth the higher point value listed on the innervated Muscle Card.
- Special Cards: *Wild Cord* cards count towards this total. *Anomalous Innervation* cards do not.
- The player with the most total points wins. In the event of a tie, the player with the most innervated Muscle Cards wins. If there is still a tie, the player with the most innervated pronator teres Muscle Cards wins.

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