IRO

INTERNATIONAL **SEARCH AND RESCUE DOG ORGANISATION**

How to improve the skills of Search and Rescue Dog Handlers with the use of Neurosciences

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PSYCHOLOGIST - NEUROPSYCHOLOGY AND EDUCATION MSC.

Extensive training and experience since 1986 in planning, educational, operational and management duties in Disaster Risk Management (DRM), Emergency Preparedness (EP), Search and Rescue with dogs (K-SAR), Education in Emergencies (EiE), Psycho Social Support (PSS), Child Protection in Emergencies (CPiE), Business Continuity Management (BCM), humanitarian action and international cooperation with all types of governmental authorities, NGOs and communities **in more than 30 countries in the Americas, the Caribbean, Africa and Europe.**

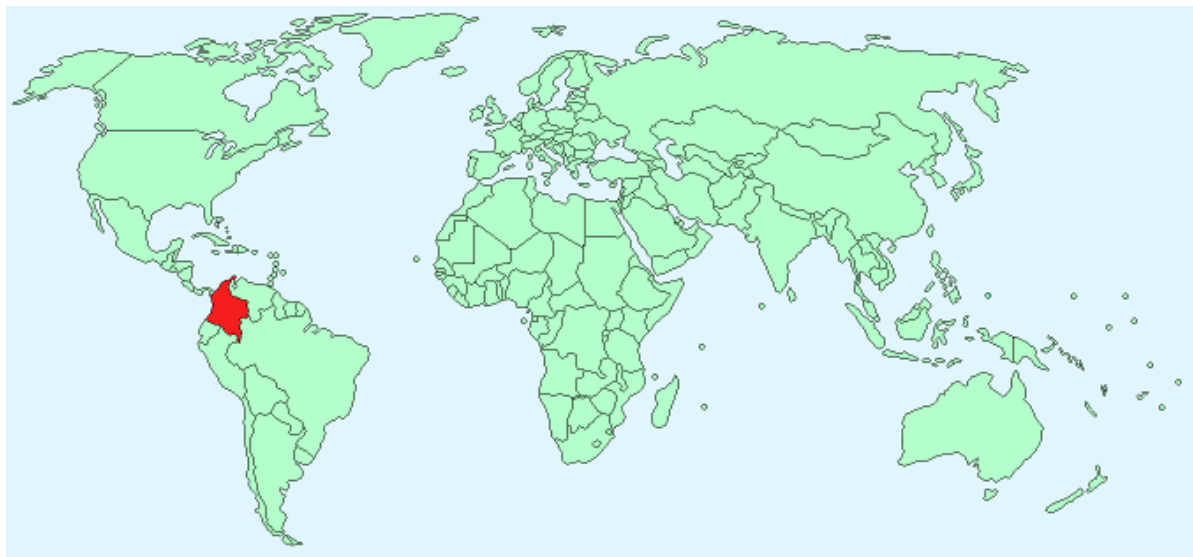**IRO MRT Rubble Classifier**

I AM A MEMBER OF:

Fundación para la Gestión del Riesgo / FGR

www.gestiondelriesgo.org

IRO National Rescue Dog Handling Organisation in Colombia.

I LIVE IN **COLOMBIA**, SOUTH AMERICA:

- 50 million inhabitants in 1.138.000 square Km.

- Great geography, climate, cultural, social and general variability and complexity.

AS SEARCH AND RESCUE UNITS, OUR GROUPS RESPOND TO:

AREA SEARCHES

Colombian heights go from 0 to 5.775 m. above the sea level.

Our rural searches go up to 5.000 m. high, in all kind of tropical forests, high mountains and diverse slope, temperature and humidity conditions.
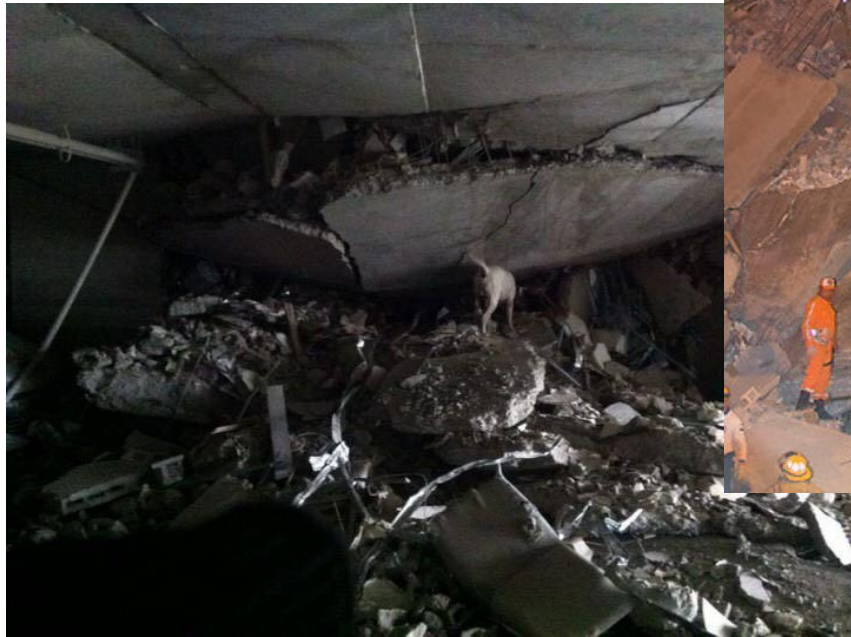
MANTRAILING SEARCHES

RUBBLE SEARCHES

AS A CONSEQUENCE OF:

- Earthquakes.

- Tsunamis.

- Mud avalanches.

- Volcanic activity.

- Non intentional explosions.

- Collapsed buildings.

- Terrorist attacks.

- Landslides.

WE DEPLOY NOT ONLY IN **COLOMBIA**: WE HAVE HAD SUCCESSFUL MISSIONS IN **MEXICO**, **HAITI**, **VENEZUELA**, **ECUADOR**, **PERU** AND OTHER COUNTRIES OF THE REGION.

Since 1991 I have trained thousands of Handlers and Dogs in more tan 100 training events from **MEXICO** to **ARGENTINA**, and as an **AUI Judge** I have evaluated in the field and certified dozens of them.

I introduced IRO to Latin America, and I translated into Spanish the 2006, 2012 and 2019 FCI/IRO IPO-R versions. This is the most widely used and recognized regulation in the world to evaluate and certify the Search and Rescue Dogs and Handlers.

As an **IRO MRT CLASSIFIER**, I have evaluated hundreds of Search and Rescue Dogs and Handlers from many groups and countries coming from the Americas, Asia and Europe in MRT tests in **Germany**, **Austria**, **Croatia**, **Denmark** and other nations.

ALONG ALL THESE ACTIVITIES, THE **TACTICAL GOALS** TO USE TRAINED DOGS HAVE ALWAYS BEEN:

To reduce **Time Risks Costs** in the search and rescue operations.

What are the most common mistakes that Search Dog Handlers make during testing and emergency interventions?

1. The handler does not send the dog to search in all sectors (very frequent tactical failure, entirely attributable to the handler).

2. The handler sends the dog to search in an specific sector, and the dog is not able to reach that sector (also frequent, dexterity / directability failures and / or very short distances or depths of the searches and the alerts in training).

3. Handlers that send the dog to search a sector, and the dog cannot overcome an obstacle to enter this sector. But the handler insists on ordering the dog to enter that same sector through the same obstacle 2, 3 or 4 times, without success.

The handlers do not change the search strategy, do not send the dog to another sector, do not try to enter through another point. Then **they fatigue the animal, they lose time, they fail to register that sector, they lose patience, they stress and stress the dog** and from then on **the confidence and performance of both of them fall.**

4. They fail to find victims.

5. They make false alerts.

6. Failures in the agility in the rubbles or the area search of the dog and / or the handler.

7. Physical and / or mental fatigue.

8. Not knowing how to work in the dark.

9. Alerts with poor quality:

Undecided, inaccurate, dogs that leave the source of smell, who do not keep the alert, handlers that motivate alerts, interfere or do not recognize them.

All of the above errors are due to technical training failures in their source groups. And they must be corrected at the same origin.

AND THE MOST FREQUENT SOURCE OF FAILURE:

STRESS OF THE HANDLER DURING THE TEST OR THE EMERGENCY

A handler who does not know how to regulate him/herself, who is not prepared to deal with the pressure over the time:

- Makes many more mistakes.
- Transfers the pressure to the dog.
- Builds false alerts.
- Confuses the information provided by the Judge (in a Test) or the Coordinator (in a mission).
- Doesn´t check all the sectors.
- Forgets controlling time.
- Drains the dog.
- Interferes with the alerts or doesn´t recognize them.
- Breaks the rules and loses points in the tests.

During the test or emergency, many Handlers "don't see" many things that everyone else sees.

They seem to forget what they know, and lose technical judgment.

Why do they make those mistakes, when they know these are mistakes and have trained so much?

Because most of the groups invest a lot of time, resources and energy **ONLY** in the technical training (obedience, dexterity, search and alert) of their teams.

It´s OK, but they don´t take advantage of a proper **psychological and tactical training** of the Handlers **to be able to efficiently work under the pressure** of complex, demanding or long searches and emergencies.

In a test, they want to approve, they perceive the expectation of their group and their bosses, they have invested a lot of time and energy, the public exposure, the peer competition, they feel observed and judged by others and they are afraid of failure:
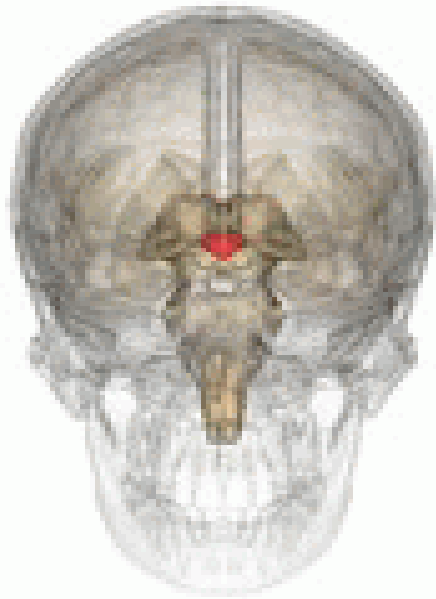
THEY STRESS

In a mission, all of the above, but also they feel pressured by the urgency of the situation, the desire to save lives, the exposure to risk and the media, the harshness of the context, and sometimes the pressure of the authorities and the families of the victims:
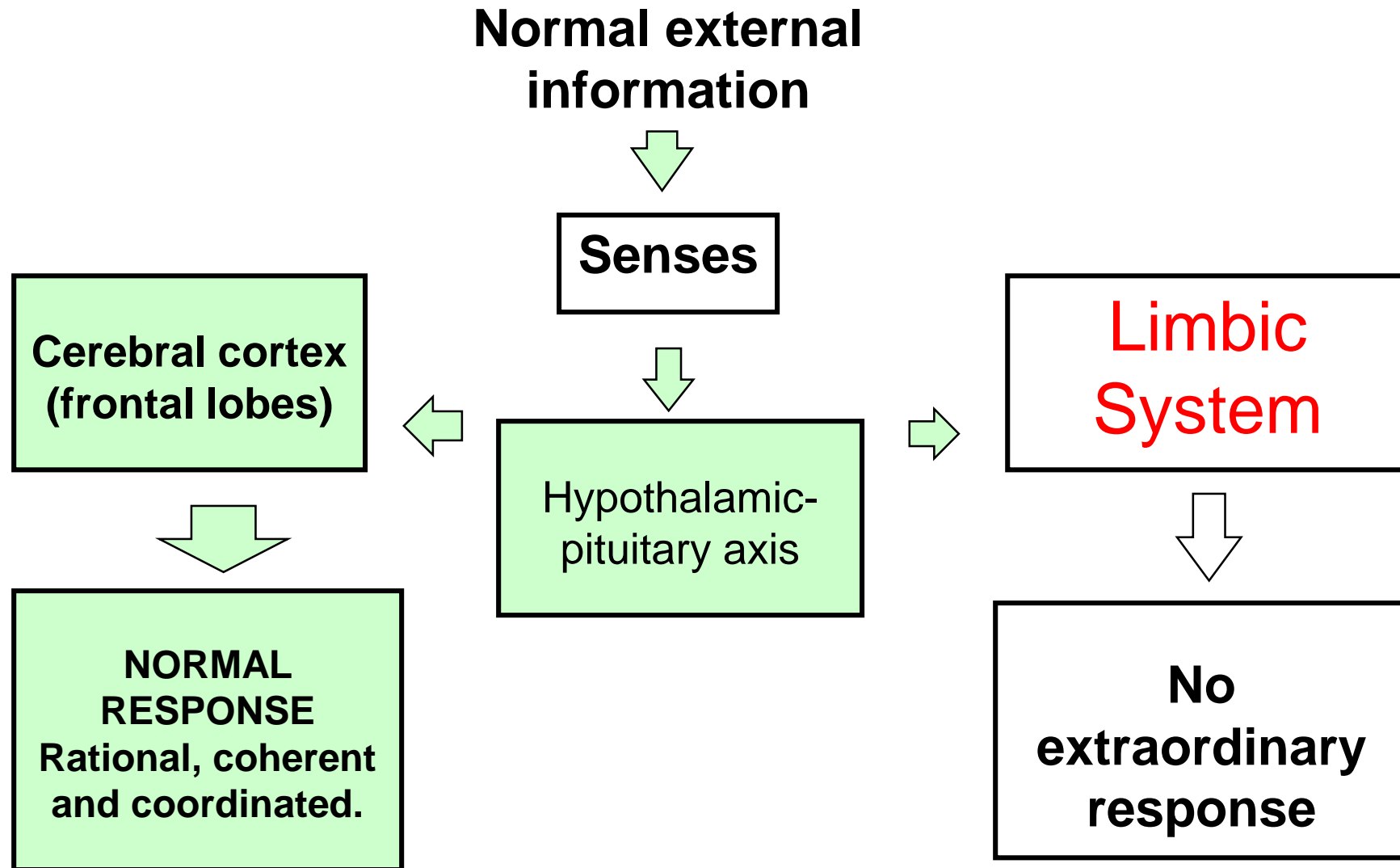
AGAIN, THEY STRESS

AND HOW DOES THE HUMAN BRAIN WORK UNDER PRESSURE?

First, this is how our brain works during "normal situations":

Normal external information

Senses

Cerebral cortex (frontal lobes)

Hypothalamic-pituitary axis

Limbic System

NORMAL RESPONSE
Rational, coherent and coordinated.
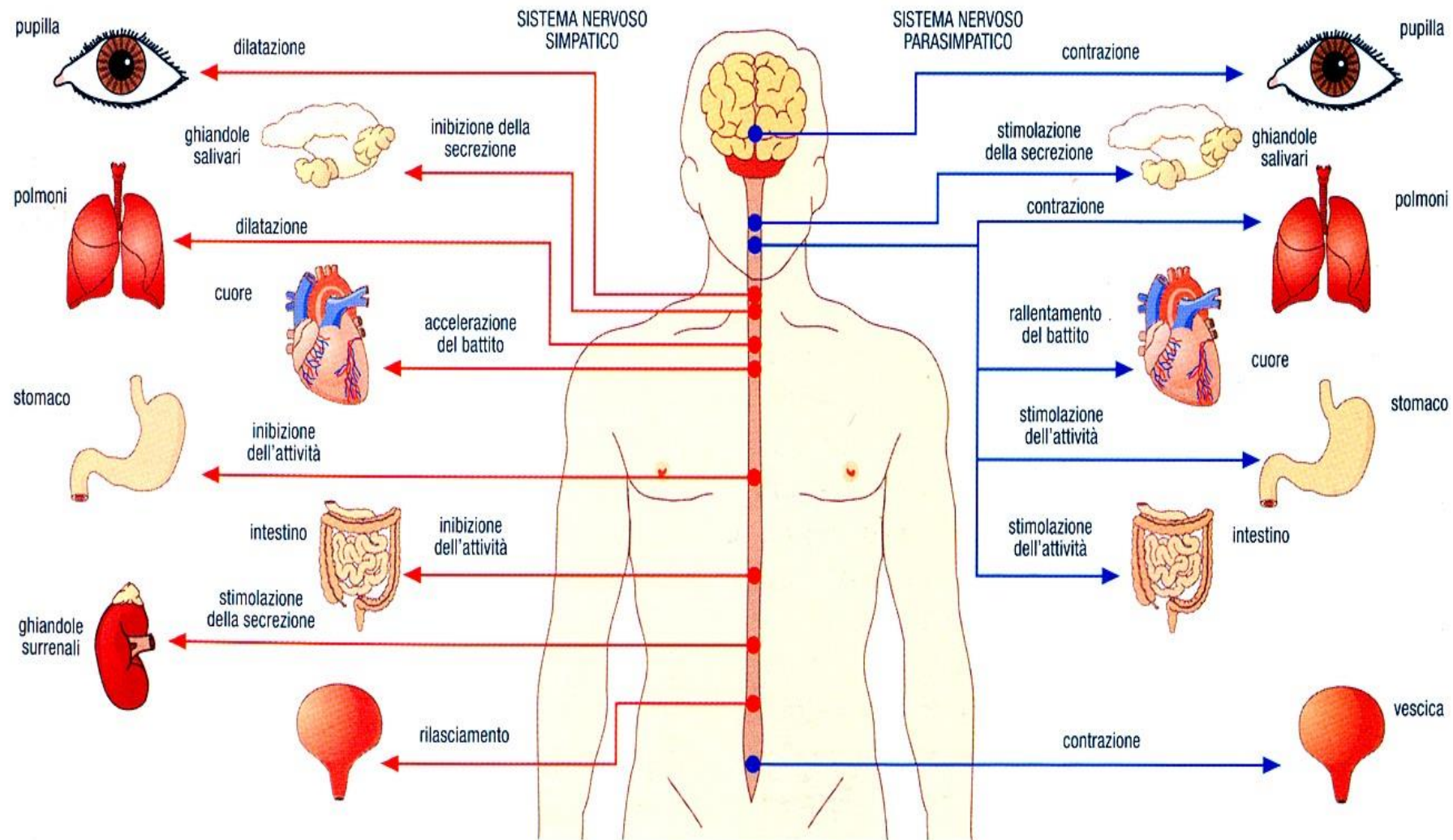
No extraordinary response

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Now let´s understand how our body reacts to pressure:

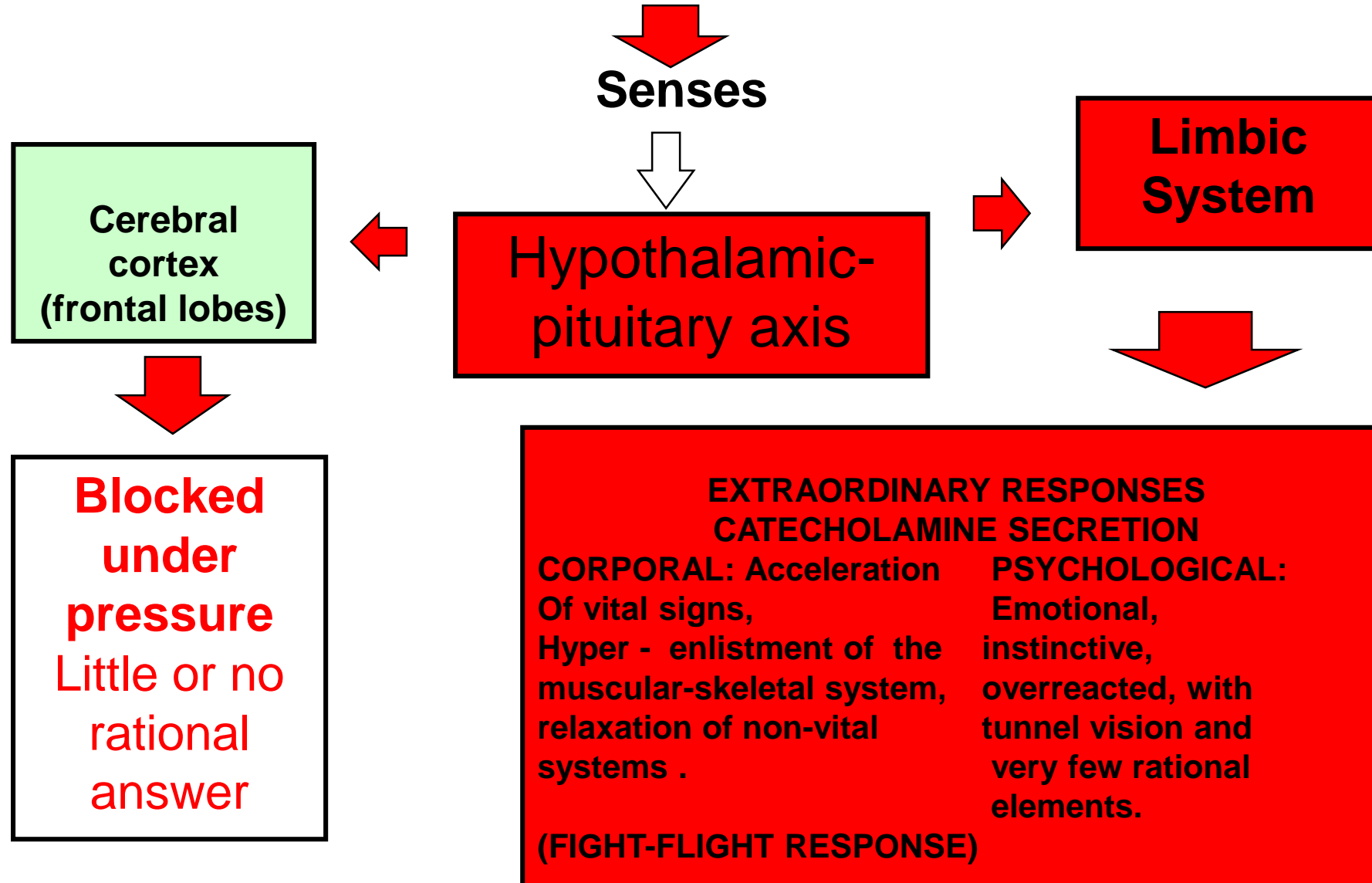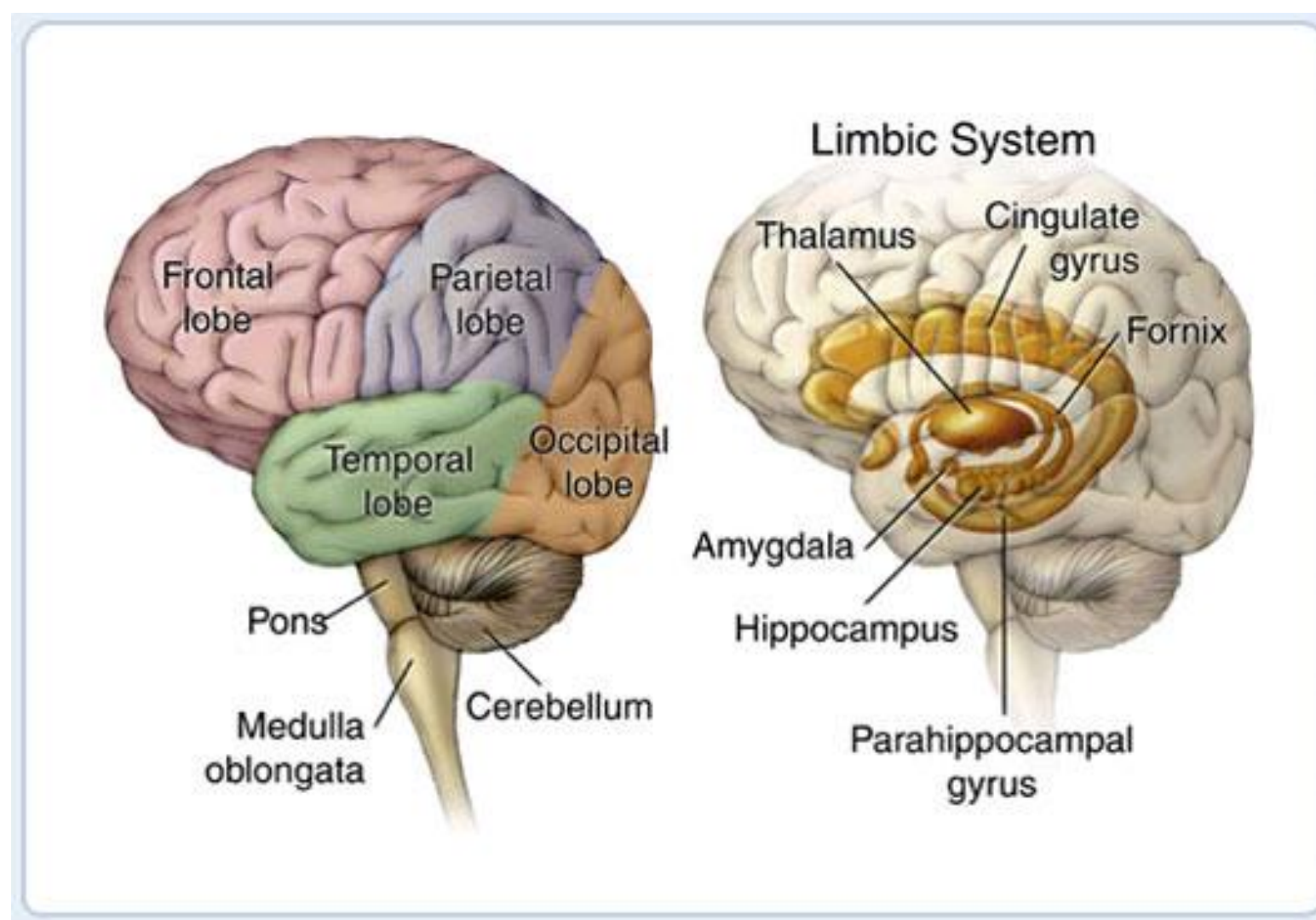# STRESS - Catecolamenic discharge:

And who coordinates those reactions?

CRISIS – EXTRAORDINARY INFORMATION
Too much, too quick, in a very short time, too heavy, very threatening, very demanding or very compromising: STRESSFUL

Senses

Cerebral cortex (frontal lobes)

Hypothalamic-pituitary axis

Limbic System

Blocked under pressure
Little or no rational answer

EXTRAORDINARY RESPONSES
CATECHOLAMINE SECRETION
CORPORAL: Acceleration Of vital signs, Hyper - enlistment of the muscular-skeletal system, relaxation of non-vital systems .

PSYCHOLOGICAL: Emotional, instinctive, overreacted, with tunnel vision and very few rational elements.

(FIGHT-FLIGHT RESPONSE)

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The rational intelligence (the frontal lobes, to the left), can be overwhelmed undes servere STRESS. Then, the instinctive/emotional conduct can take charge (limbic system, to the right).
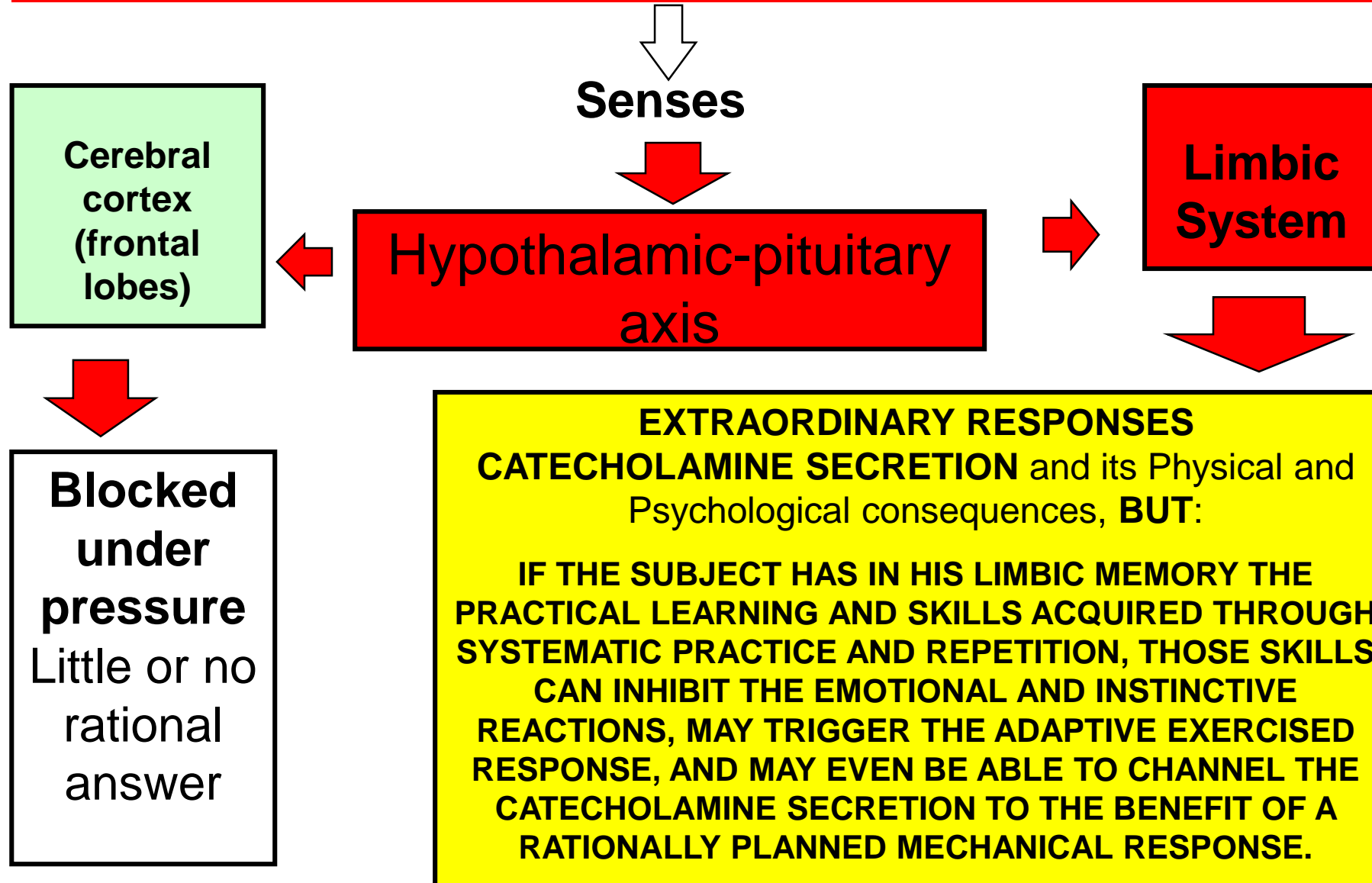
LOSS OF CONTROL

How can we prevent and correct that?

What resources do Neurosciences offer to improve the training of Handlers, and their performance under the pressure of tests and emergency interventions?

NEUROEFFICIENT TRAINING

It integrates the **"rational and intelligent"** cortical structures and processes of the human brain, with the **"instinctive and emotional"** structures and processes of the more basic subcortical areas, which are very important to learn and to remember but which are little known and used by conventional methods of training.

It increases the levels of interest and motivation in learning, reinforces the impact, improves the commitment and remembrance of what has been learned, and especially **optimizes the installation and execution under pressure of specific practical skills to solve the stressful situations for which you train**.

It improves the performance and reliability of the Handler, even under the pressure of tests and emergencies.

It includes:

- General study of frequent failures in the performance of the Handlers.

- Self-awareness of the personal failure trends as a Handler.

- Guidance for better breathing on a daily basis and during pressure situations.

- Techniques for visualization and mental simulation of tests and interventions.

- Systematic practical repetition of key technical procedures.

- Physical exercise as a tool to improve working memory and performance under pressure.

- Gradual inoculation and stress management associated with testing and emergencies.

- Installation of positive attitudes and self-confidence towards testing and emergencies.

- Other resources of emotional self-control.

The application of these techniques significantly helped to improve the results of the Colombian teams in the IRO tests: we have more certified dogs and handlers than the other countries in the region, TOGETHER.

THIS PRESENTATION CAN BE FOUND AT:

www.gestiondelriesgo.org

AND THE BLOG OF:

www.neuroeficiencia.com

HAVE WARM REGARDS FROM COLOMBIA!

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