### Novità nella classificazione ICD 11

## Diego Fornasari

Dipartimento Biotecnologie Mediche e Medicina Traslazionale Università degli Studi di Milano- La Statale

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## PAIN

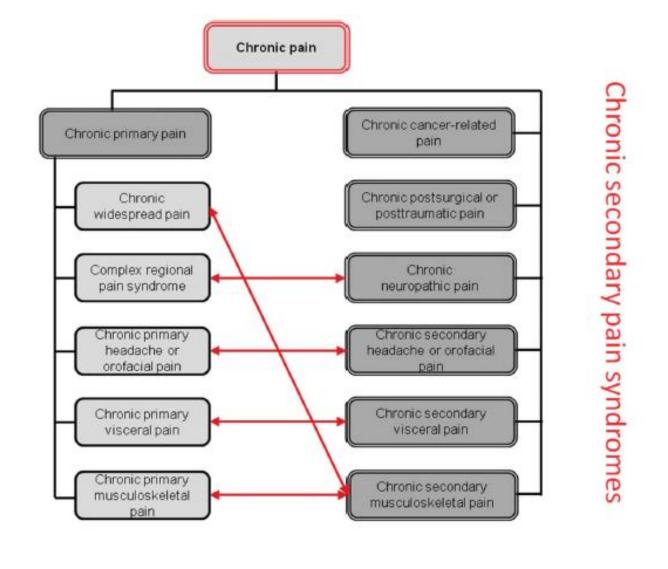


# Chronic pain as a symptom or a disease: the IASP Classification of Chronic Pain for the International Classification of Diseases (ICD-11)

Rolf-Detlef Treede<sup>a,\*</sup>, Winfried Rief<sup>b</sup>, Antonia Barke<sup>b</sup>. Qasim Aziz<sup>c</sup>. Michael I. Bennett<sup>d</sup>, Rafael Benoliel<sup>e</sup>, Milton Cohen<sup>f</sup>, Stefan Evers<sup>g</sup>, Nanna B. I R.-D. Treede et al. • 160 (2019) 19–27 Beatrice Korwisi<sup>b</sup>, Eva Kosek<sup>o</sup>, Patricia I Stephan Schug<sup>t,u</sup>, Blair H. Smith<sup>v</sup>, Peter Svensson<sup>w,x</sup>, Johan W.S. Vlaeyen<sup>y,z,aa</sup>, Shuu-Jiun Wang<sup>bb,cc</sup>

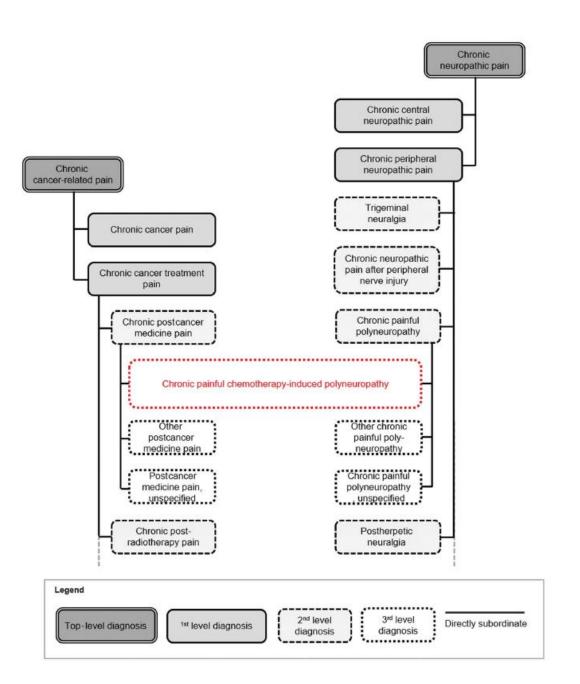
Chronic pain was defined previously as pain that persists past normal healing time and hence lacks the acute warning
function of physiological nociception. The concept of persistence beyond normal healing may apply to pain after surgery
and the concept of lack of warning function to migraine headaches, but these concepts are difficult to verify in other
conditions such as chronic musculoskeletal or neuropathic pains.

Hence, a purely temporal criterion was chosen: chronic pain is pain that lasts or recurs for longer than 3 months





PAIN 160 (2019) 19-27



PAIN 160 (2019) 19-27

The term "chronic primary pain" may sound unusual but is consistent with language used in other parts of ICD-11.

The recently proposed definition of "nociplastic pain" may describe some of the underlying mechanisms.

### IASP DEFINITION OF NOCIPLASTIC PAIN

«Pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain»

Nociplatic pain is thought to result from altered pain procesing in the central nervous system

### Reliability over time

If the chronic pain condition persists, clinicians should continue to use a diagnosis of chronic secondary pain even after the causing medical condition has been treated successfully or remitted.

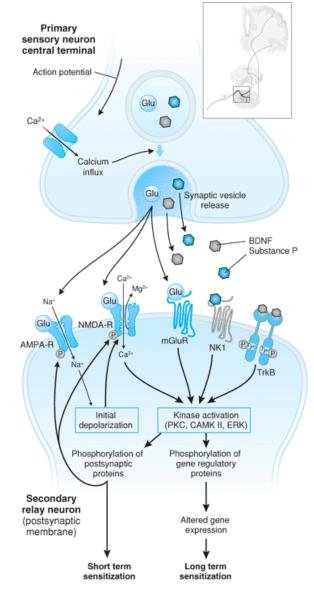
After longer periods of obvious dissociation between the medical causes and chronic pain, and with clear

evidence for other factors determining the chronic pain condition, a change of the chronic pain diagnosis (eg,

to chronic primary pain, or to another chronic secondary pain diagnosis) should be considered

#### Potential mixed pain states Sciatica, Low back pain, Neck pain, Cancer pain, Osteoathritis pain, Chronic postsurgical pain, Musculoskeletal disorders, Chronic Temporomandibular disorders, Lumbar spinal stenosis, Pain in Fabry Disease, Chronic joint pain, Painful ankylosing spondylitis, Leprosy, Burning mouth syndrome, ... Headaches Fibromyalgia Vulvodynia Irritable bowel **Nociplastic** Interstitial cystitis Chronic fatigue Ankylosing spondylitis Unspecific back pain Rheumatoid arthritis Nociceptive Sickle-cell disease Sciatica Neuropathic' Myofascial pain Post-stroke Osteoarthritis Spinal cord injury Visceral pain Multiple sclerosis Tendonitis Trigeminal neuralgia Bursitis Postherpetic neuralgia Gout Small-fiber neuropathies Painful polyneuropathies

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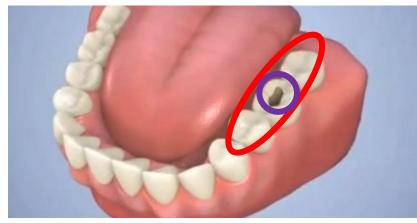
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### **SPINAL SENSITIZATION**

#### SENSIBILIZZAZIONE SPINALE



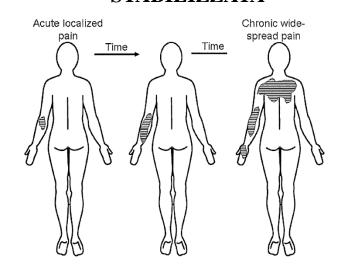
#### PLASTICITA' FUNZIONALE RAPIDAMENTE REVERSIBILE







#### PLASTICITA' FUNZIONALE STABILIZZATA

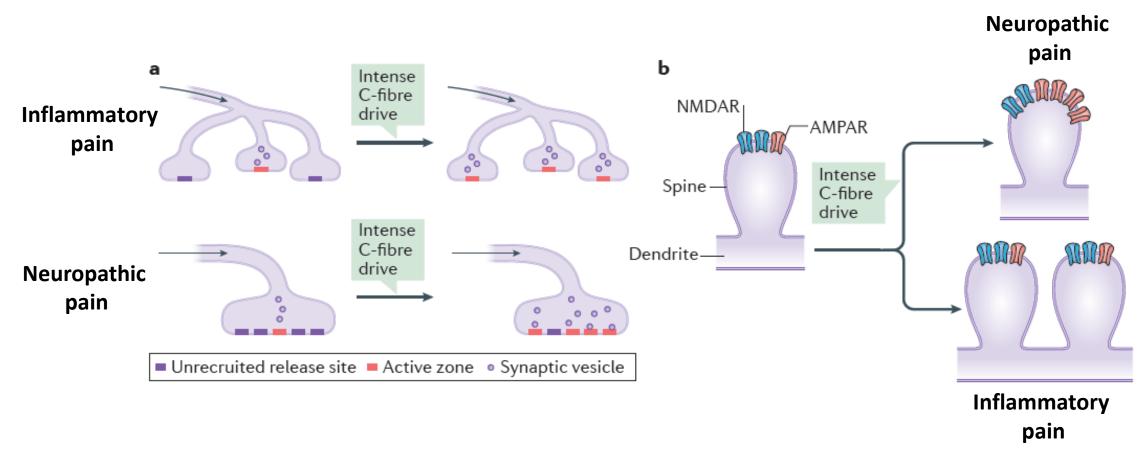




**CRONICIZZAZIONE** 

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# Nociceptive, activity-dependent presynaptic and postsynaptic plasticity at nociceptive synapses in spinal superficial laminae



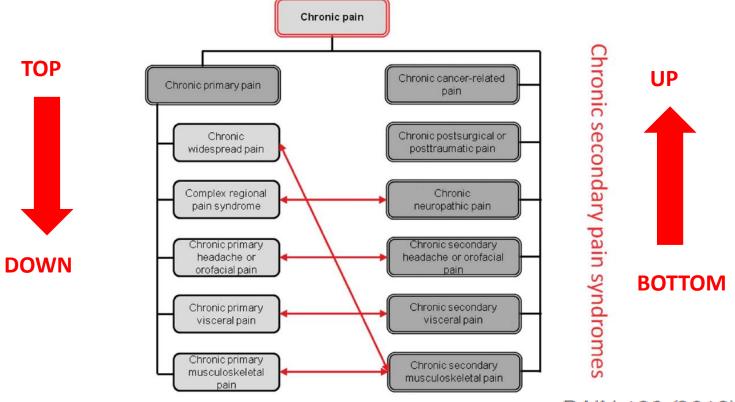
Nat Rev Neurosci 2017 Jan 20; 18 (2): 113



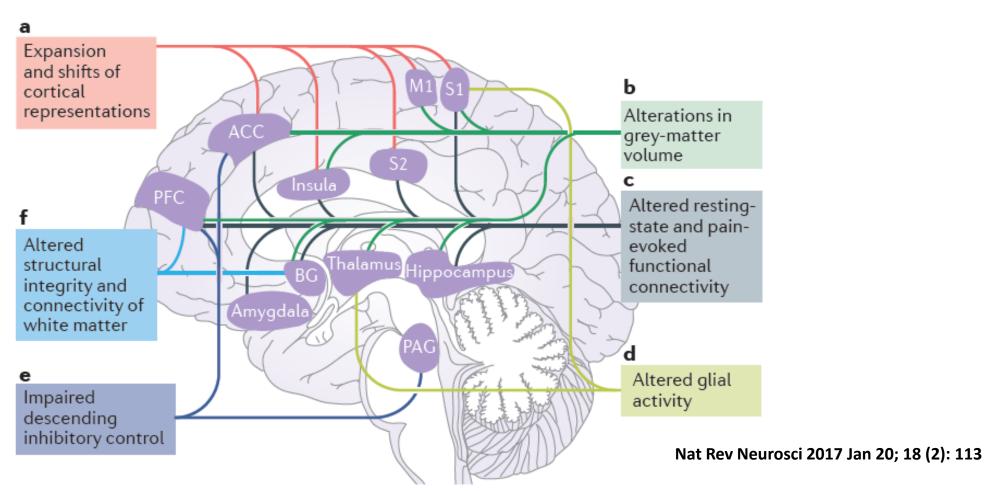


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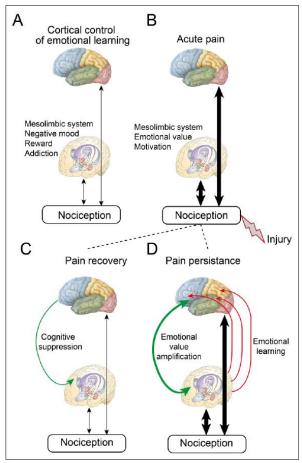
Rolf-Detlef Treede<sup>a,\*</sup>, Winfried Rief<sup>b</sup>, Antonia Barke<sup>b</sup>, Qasim Aziz<sup>c</sup>, Michael I. Bennett<sup>d</sup>, Rafael Benoliel<sup>e</sup>, Milton Cohen<sup>f</sup>, Stefan Evers<sup>g</sup>, Nanna B. Finnerup<sup>h,i</sup>, Michael B. First<sup>j</sup>, Maria Adele Giamberardino<sup>k</sup>, Stein Kaasa<sup>l,m,n</sup>, Beatrice Korwisi<sup>b</sup>, Eva Kosek<sup>o</sup>, Patricia Lavand'homme<sup>p</sup>, Michael Nicholas<sup>q</sup>, Serge Perrot<sup>r</sup>, Joachim Scholz<sup>s</sup>, Stephan Schug<sup>t,u</sup>, Blair H. Smith<sup>v</sup>, Peter Svensson<sup>w,x</sup>, Johan W.S. Vlaeyen<sup>y,z,aa</sup>, Shuu-Jiun Wang<sup>bb,cc</sup>



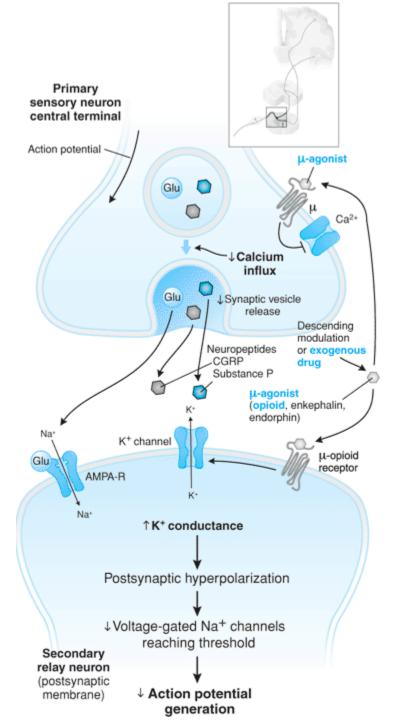
# Structural and functional changes in the human brain in chronic pain conditions.

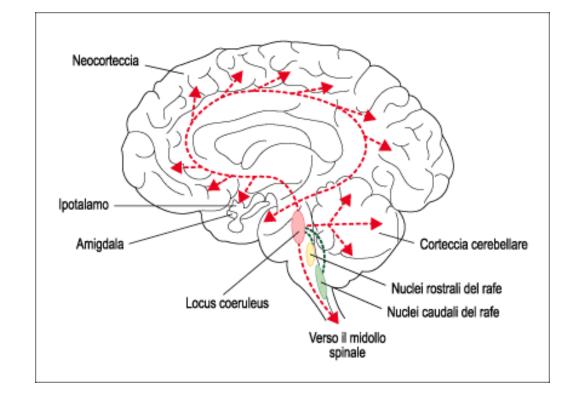


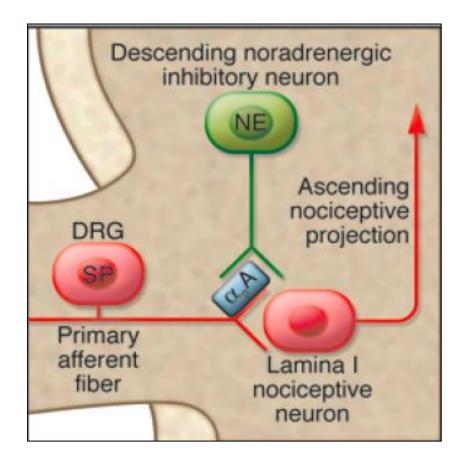
#### Chronic pain depends on the corticolimbic properties interacting with nociceptive inputs.

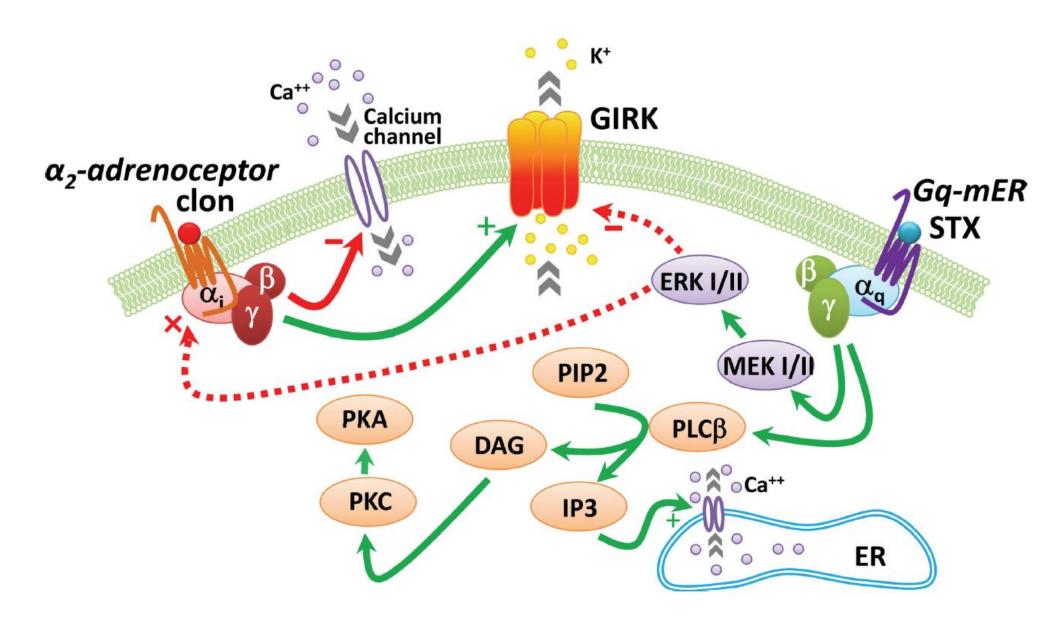


Journal of Dental Research 2016, Vol. 95(6) 605–612

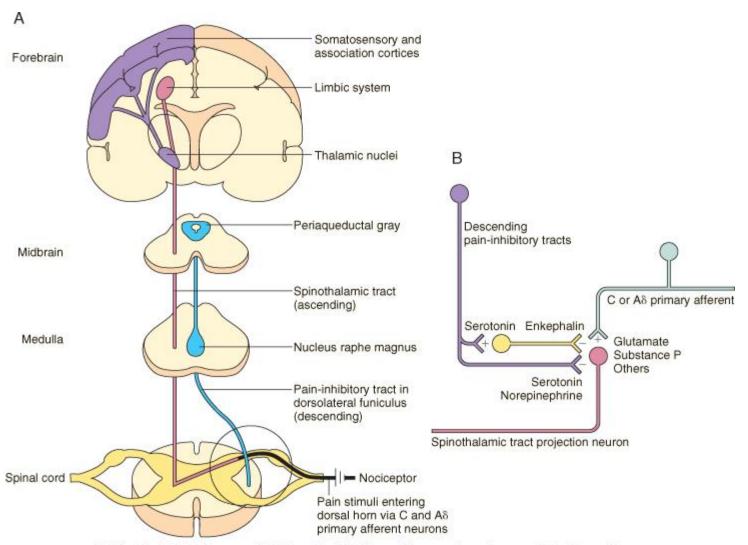




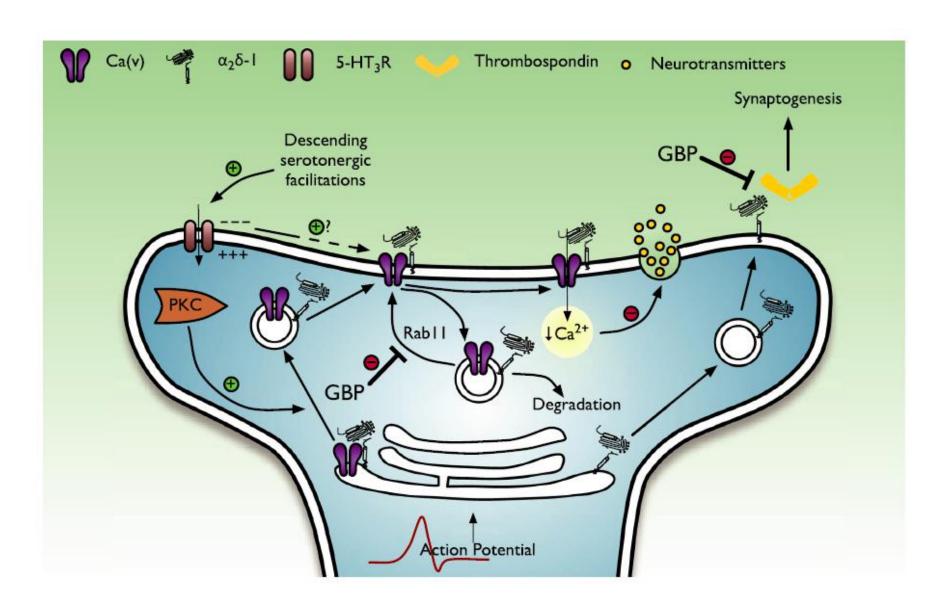


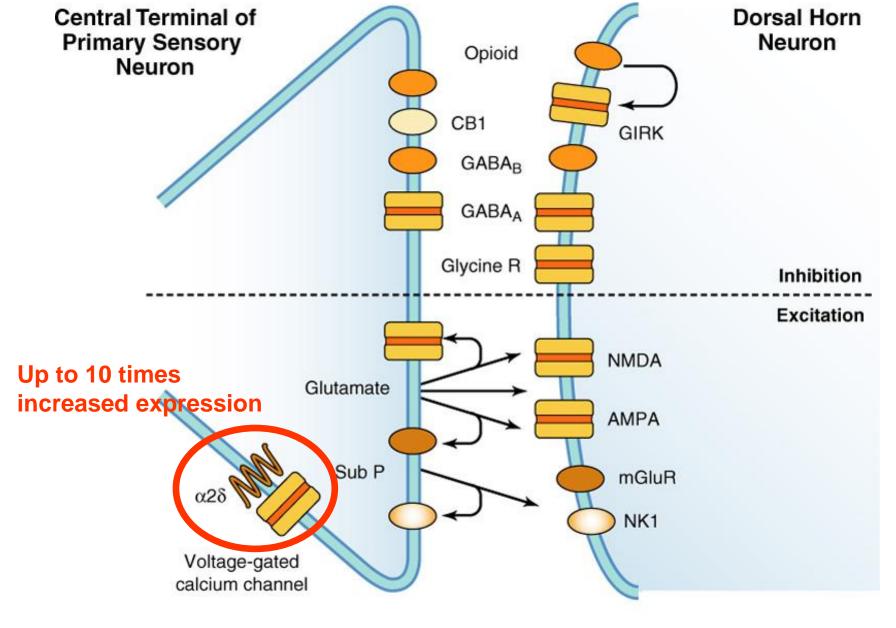


Neuroscience. 2014 May 16; 267: 122–134.



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Presynaptic

Postsynaptic

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Figure 2 Potential targets and receptor mechanism mediating the pain modulatory effects of monoamines in the dorsal horn Nociceptor afferent Monoaminergic pathways  $\alpha_{2A}$ NET DAT Ca2+ 5-HT<sub>1B</sub> SERT 5-HT<sub>3</sub> Ca2+ Norepinephrine Dopamine 5-HT<sub>1B</sub> Serotonin Glutamate 5-HT<sub>1A</sub> Substance P  $\alpha_1$ 5-HT GABA Local inhibitory + neuron Spinothalamic neuron

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Clinical Investigation

#### CLINICAL INVESTIGATION

## The number of central nervous system-driven symptoms predicts subsequent chronic primary pain: evidence from UK Biobank

Eoin Kelleher<sup>1,\*</sup>, Chelsea M. Kaplan<sup>2</sup>, Dorna Kheirabadi<sup>2</sup>, Andrew Schrepf<sup>2</sup>, Irene Tracey<sup>1</sup>, Daniel J. Clauw<sup>2</sup> and Anushka Irani<sup>1,3</sup>

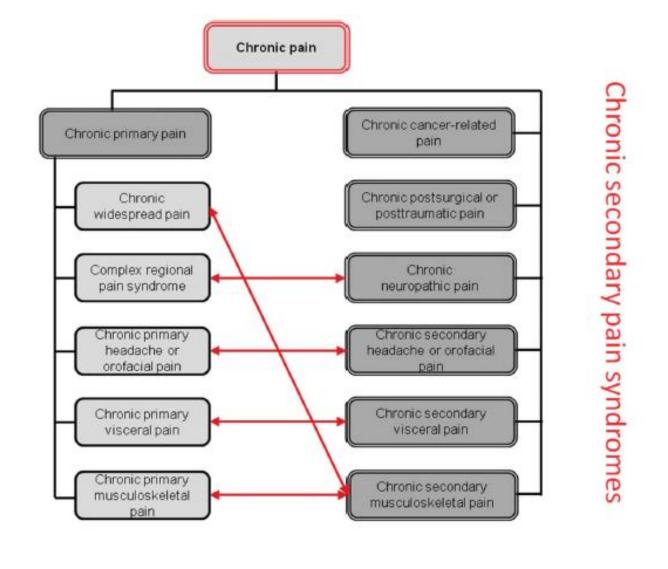
<sup>1</sup>Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, UK, <sup>2</sup>Chronic Pain and Fatigue Research Center, University of Michigan, Ann Arbor, MI, USA and <sup>3</sup>Department of Rheumatology, Mayo Clinic, Jacksonville, FL, USA

\*Corresponding author. E-mail: Eoin.kelleher@ndcn.ox.ac.uk, X@EoinKr

#### Editor's key points

 Primary pain includes conditions such as fibromyalgia, chronic low back pain, or irritable bowel syndrome. These patients often report central nervous system (CNS) symptoms and mood disorders, but it is unclear whether these symptoms precede or increase the risk of developing primary pain.

- In a prospective cohort study from the large UK biobank, authors show that a greater number of CNS symptoms (sleep, affect, cognition) in adults without pain at baseline is associated with increased risk of developing chronic primary pain but not other types of pain over a 10-yr period.
- This indicates the need for early recognition and intervention for these CNS symptoms.





PAIN 160 (2019) 19-27

