US 20210284708A1

(19) United States

(12) Patent Application Publication

Gonias et al.

(10) Pub. No.: US 2021/0284708 A1

(43) Pub. Date: Sep. 16, 2021

(54) **METHODS OF PROMOTING CNS NEURONAL REPAIR BY INHIBITING LRP-1**

(71) Applicant: **The Regents of the University of California**, Oakland, CA (US)

(72) Inventors: **Steven L. Gonias**, San Diego, CA (US); **Travis Stiles**, San Diego, CA (US); **Alban Gaultier**, Charlottesville, VA (US); **Wendy M. Campana**, La Jolla, CA (US); **Katerina Akassoglou**, San Francisco, CA (US)

(73) Assignee: **The J. David Gladstone Institutes**, San Francisco, CA (US)

(21) Appl. No.: **17/090,566**

(22) Filed: **Nov. 5, 2020**

Related U.S. Application Data

(63) Continuation of application No. 15/189,965, filed on Jun. 22, 2016, now Pat. No. 10,829,536, which is a continuation of application No. 14/113,626, filed on Feb. 18, 2014, now Pat. No. 9,376,481, filed as application No. PCT/US2012/035125 on Apr. 26, 2012.

(60) Provisional application No. 61/479,210, filed on Apr. 26, 2011.

Publication Classification

(51) **Int. Cl.**

C07K 14/705	(2006.01)
A61K 38/17	(2006.01)
A61K 38/18	(2006.01)
A61K 45/06	(2006.01)
C07K 16/28	(2006.01)
C12N 15/113	(2006.01)
C12N 15/86	(2006.01)

(52) **U.S. Cl.**

CPC ***C07K 14/705*** (2013.01); ***A61K 38/177*** (2013.01); ***A61K 38/18*** (2013.01); *C12N 2310/14* (2013.01); ***C07K 16/28*** (2013.01); ***C12N 15/1138*** (2013.01); ***C12N 15/86*** (2013.01); ***A61K 45/06*** (2013.01)

(57) **ABSTRACT**

This invention provides methods for promoting and/or restoring neurite outgrowth and neuronal regeneration by contacting an injured neuron with an inhibitor of low density lipoprotein receptor-related protein-1 (LRP-1).

Specification includes a Sequence Listing.