

University of Tasmania Open Access Repository

Cover sheet

Title

The Role of Metallothionein and Astrocyte-Neuron Interactions in Injury to the CNS

Author

Fung, SJ, Chung, RS, Adrian West

Bibliographic citation

Fung, SJ; Chung, RS; West, Adrian (2008). The Role of Metallothionein and Astrocyte-Neuron Interactions in Injury to the CNS. University Of Tasmania. Chapter. https://figshare.utas.edu.au/articles/chapter/The_Role_of_Metallothionein_and_Astrocyte-Neuron_Interactions_in_Injury_to_the_CNS/23053232

Is published in:

Copyright information

This version of work is made accessible in the repository with the permission of the copyright holder/s under the following,

Licence.

If you believe that this work infringes copyright, please email details to: oa.repository@utas.edu.au

Downloaded from University of Tasmania Open Access Repository

Please do not remove this coversheet as it contains citation and copyright information.

University of Tasmania Open Access Repository

Library and Cultural Collections University of Tasmania Private Bag 3 Hobart, TAS 7005 Australia E oa.repository@utas.edu.au

*M*etallothioneins in Biochemistry and Pathology

edited by

Paolo Zatta University of Padova, Italy Published by World Scientific Publishing Co. Pte. Ltd. 5 Toh Tuck Link, Singapore 596224 USA office: 27 Warren Street, Suite 401-402, Hackensack, NJ 07601 UK office: 57 Shelton Street, Covent Garden, London WC2H 9HE

British Library Cataloguing-in-Publication Data A catalogue record for this book is available from the British Library.

METALLOTHIONEINS IN BIOCHEMISTRY AND PATHOLOGY

Copyright © 2008 by World Scientific Publishing Co. Pte. Ltd.

All rights reserved. This book, or parts thereof, may not be reproduced in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the Publisher.

For photocopying of material in this volume, please pay a copying fee through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA. In this case permission to photocopy is not required from the publisher.

ISBN-13 978-981-277-893-2 ISBN-10 981-277-893-4

Typeset by Stallion Press Email: enquiries@stallionpress.com

CONTENTS

vii

List c	of Contributors	
Part	I: Metallothionein in Neurological Disorders	1
1.	Metallothionein Structure and Reactivity	3
	Milan Vašák and Gabriele Meloni	
2.	Thiol Reactivity as a Central Aspect of Metallothionein's Mechanism of Action	27
	Wolfgang Maret	17
3.	Metallothioneins and Neurodegenerative Diseases	47
	Silvia Bolognin and Paolo Zatta	71
4.	Metallothionein and Brain Inflammation	71
	Juan Hidalgo	02
5.	Metallothionein and Autism	93
	Sarah E. Owens, Marshall L. Summar and Michael Aschner	
6.	The Role of Metallothionein and	
	Astrocyte–Neuron Interactions in Injury to the CNS	117
	Samantha J. Fung, Roger S. Chung and Adrian West	