

Royal College of Psychiatrists

Pan American

Division Newsletter



November 2018 (Issue 47)



Sophia Frangou
Chair



Kenneth Kaufman
Vice-Chair



Allan Tasman
Financial Officer

Dear Colleagues

Is our gut microbiome the part of our “unconscious mind”?

In a new twist to the old psychoanalytic theories Allen and colleagues argue for a [psychology of the gut microbiome](#) based on new research that has revealed direct links between the gut microbiome and the brain. The gut microbiome refers to the trillions of micro-organisms, including bacteria, fungi, and viruses, which naturally reside within the human digestive-tract. Extensive research has established that the human gut microbiome is involved in nutrition, physiology, metabolism, epigenetic regulation and immune activity. Direct brain-gut connections were first identified by Diego Bohórquez from the University in Durham, North Carolina in 2010. In a recent paper in [Science](#), he and his team showed that enteroendocrine cells, known to send hormonal messages to the brain, also formed glutamatergic connections with vagal neurons; these connections allowed signals to reach the brain within seconds.

Additional clues about how gut sensory cells may influence behaviour were presented by in two recent papers. As reported in [Cell](#), Ivan de Araujo, from the Icahn School of Medicine at Mount Sinai, New York, and his team used optogenetic stimulation of the gut-vagal axis in mice. The glutamatergic neurons of the dorsolateral parabrachial region acted as a relay to the right vagal sensory ganglion and to dopamine cells in substantia nigra. This experimental intervention induced food-related reward behaviour in mice which prompted the investigator to label these neurons as part of a wider reward system. In another study published in [eLife](#), a team from the University College Cork, Ireland, led by Timothy Dinan and John Cryan, focused on transcriptional regulation within the

amygdala in germ-free (GF) and control mice. The amygdala is a brain region that is involved in processing social and reward signals. In the control mice, exposure to social stimuli resulted in transcriptional changes in the amygdala which were both attenuated and altered in GF mice. Behaviourally, GF mice showed increased anxiety and reduced sociability.

Together these studies suggest that the gut microbiome is involved in the molecular and cellular regulation of biological processes associated with mood, motivation and social cognition. Although many questions remain before the clinical implications become clear, these findings provide new leads that may ultimately inform new treatment for obesity, eating disorders, and depression.

We hope you find these studies interesting and informative.

As always we want to hear from you! Email us at panamericandivision@rcpsych.ac.uk

Sophia Frangou

Kenneth Kaufman

Allan Tasman

This and That

✿ Job Board ✿

The Job Board can be accessed at http://jobs.rcpsych.ac.uk/home/index.cfm?site_id=16082 The site accepts job postings from employers and allows job seekers to search for jobs and create personalized alerts based on their interests. Please note that the **postings are international** (not just UK) and include clinical and academic posts at all levels of seniority.

✿ Medical Training Initiative ✿

The Medical Training Initiative (MTI) is designed to enable a small number of International Medical and Dental Graduates to enter the UK to experience training in the NHS for up to two years before returning to their home country. For more details including how to apply please visit the College's website at <https://www.rcpsych.ac.uk/workinpsychiatry/internationalaffairsunit/medicaltraininginitiative.aspx>

✿ RCPsych PanAm Book club ✿

The book club features books (recommended by our members). The topic has to be relevant to psychiatry and neuroscience from either a scientific, literary or societal perspective. Self-nominations by authors who are college members are welcome. Please provide a brief comment for each recommendation but this is optional. Any ideas? Please send them in at panamericandivision@rcpsych.ac.uk! NB: Inclusion of a book in the PanAm Book Club does not imply endorsement or promotion by the RCPsych.

Book of the Month

Previously featured

Computational Psychiatry: New Perspectives on Mental Illness

By A. David Redish and Joshua A. Gordon (Editors) (Strüngmann Forum Report, The MIT Press; 1st edition 2016)

What is Real?

By Adam Becker (Basic Books 2018)

Advice for a Young Investigator

By Santiago Ramón y Cajal (translated by Neely and Larry W. Swanson) (A Bradford Book; 1st edition 2004)

The Knife Went In: A Prison-Doctor on Britain's Dark Side

By Theodore Dalrymple (Gibson Square Books Ltd, Revised edition 2018)

Maps of Meaning: The Architecture of Belief

By Jordan Peterson (Routledge; 1st edition March 1999)

The Maudsley Prescribing Guidelines in Psychiatry, 13th Edition

By David M. Taylor, Thomas R. E. Barnes and Allan H. Young (Wiley Blackwell, 2018)

This is the updated edition of the word-leading and essential reference book for the prescribing of drugs for patients with mental health disorders.

Neuroexistentialism

By Gregg Caruso and Owen Flanagan (Oxford University Press, 2018)

Soul Made Flesh: The Discovery of the Brain--and How it Changed the World

By Carl Zimmer (Atria Books; Reprint edition, 2005)

Dreamland: The True Tale of America's Opiate Epidemic

By Sam Quinones (Bloomsbury Press; Reprint edition 2016)

Behave: The Biology of Humans at Our Best and Worst

By Robert M. Sapolsky (Penguin Press, 2017)

Against empathy: A case for rational compassion

By Paul Bloom (HarperCollins, 2016)

The Unity-Based Family: An Empirical Study of Healthy Marriage, Family, and Parenting

By HB Danesh and Azin Nasserri (Cambridge Scholars Publishing, 2017)

Brain Apps: Hacking Neuroscience To Get There

RG Best and JM Best (Booklocker.com, 2017)

The Grey Zone: A Neuroscientist Explores Border Between Life And Death

By Adrian Owen (Scribner, 2017)

When Breath Becomes Air

By Paul Kalanithi (Random House, 2016)

Brainwashed: The Seductive Appeal of Mindless Neuroscience

By Sally Satel, Scott O. Lilienfeld (Basic Books, 2015)

The Ministry of Utmost Happiness

By Arundhati Roy (Knopf, 2017)

For all of you who love India and "The God of Small Things"

The Mask of Sanity

By Jacob Appel (Permanent Press, 2017)

Introduction to Syndemics: A Critical Systems Approach to Public and Community Health

By Merrill Singer (Jossey-Bass, 2009)

Head in the Cloud: Why Knowing Things Still Matters When Facts Are So Easy to Look Up

By William Poundstone (Little, Brown and Company, 2016)

Walking the Medicine Wheel: Healing Trauma & PTSD

By David Kopacz and Joseph Rael (Beautiful Painted Arrow)

Millichap Books/Pointer Oak, 2016

Re-humanizing Medicine: A Holistic Framework for Transforming Your Self, Your Practice, and the Culture of Medicine

By David Kopacz (Ayni Press, a division of John Hunt Publishing, 2014)

The Emotional Life of Your Brain

**By Richard J. Davidson, Sharon Begley
Avery; Reprint edition (December 24, 2012)**

Journeys into the Bright World

**by Marcia Moore and Howard Alltounian (Para Research, 1978)
Freely accessible at <http://pdf.textfiles.com/books/journeysbrightworld.pdf>**

The Doors of Perception

By Aldous Huxley (Harper Perennial Modern Classics 2009)

The Age of Wonder: The Romantic Generation and the Discovery of the Beauty and Terror of Science

by Richard Holmes (HarperCollins, 2008)

Marijuana: The Unbiased Truth about the World's Most Popular Weed

By Kevin Phill (Hazelden 2015)

Algorithms to Live By: The Computer Science of Human Decisions

By Brian Christian and Tom Griffiths (Henry Holt and Co 2016)

Why You Love Music: From Mozart to Metallica--The Emotional Power of Beautiful Sounds

By John Powell (Little, Brown and Company 2016)

Introductory Textbook of Psychiatry, Sixth Edition

By Donald W. Black and Nancy C. Andreasen (APA 2014)

(Comment by Sophia Frangou: A good textbook for residents and students updated to reflect changes in the DSM5)

Sacred Pathways: The Brain's role in Religious and Mystic Experiences

By Todd Murphy; Foreword by His Holiness The Dalai Lama and A. Persinger; 2015

NeuroTribes: The Legacy of Autism and the Future of Neurodiversity

By Steve Silberman (Penguin 2015); Winner of the 2015 Samuel Johnson Prize for non-fiction

The Digital Doctor: Hope, Hype, and Harm at the Dawn of Medicine's Computer Age

By Robert Wachter (McGraw-Hill Professional 2015)

The Well-Tuned Brain: Neuroscience and the Life Well Lived

By Peter Whybrow (WW Norton & Company 2015)

The Heart and the Bottle

By Oliver Jeffers (HarperCollins Publishers 2015)

(Comment by Sophia Frangou: An unbelievably tender book that helps children understand death and loss; it is also available as an animated film read by Helena Bonham-Carter:

<https://itunes.apple.com/gb/app/heart-bottle-for-ipad/id407795360?mt=8>)

Gratitude

By Oliver Sachs (Knopf 2015)

A Passion for Science: Stories of Discovery and Invention

By Suw Charman-Anderson (Editor) (Kindle ebook 2015)

Furiously Happy: A Funny Book About Horrible Things

By Jenny Lawson (Flatiron Books 2015)

Brain Renaissance: From Vesalius to Modern Neuroscience

By Marco Catani and Stefano Sandrone (Oxford University Press, 2015)

Shrinks: The Untold Story of Psychiatry

By Jeffrey A. Lieberman and Ogi Ogas (Little, Brown and Company, 2015)

The Future of the Brain: Essays by the World's Leading Neuroscientists

By Gary Marcus and Jeremy Freeman (Princeton University Press, 2014)

Drugs, Without the Hot Air

By David Nutt (UIT Cambridge, 2012)