A welcome to the new journal, Journal of Advanced Therapies and Medical Innovation Sciences (J.ATAMIS, www.j-atamis.org)

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Highlights

A new journal has been launched by Barcaray Publishing: Journal of Advanced Therapies and Medical Innovation Sciences (J.ATAMIS, www.j-atamis.org). This journal fills a crucial gap in the literature – and in the cycle of advances in medical science, therapeutics and devices - covering the pipeline from idea through proof of concept studies and start-up funding to regulatory approval. It will be multi-disciplinary and unusually we will have significant input from funders - both angel and venture capital-, start-up CEO’s, and regulators as well as medical scientists and triallists. We have quite frankly a stellar editorial board, with leading lights of biotechnology, medical devices, new and established pharma as well as the “other side”; CEO’s and investors.

Keywords:  Innovation, biotechnology, nanomedicine, advanced therapies, cardiology, cancer, lung disease, kidney disease, gastroenterology, immunology, rheumatology, molecular biology

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A new journal has been launched by Barcaray Publishing: Journal of Advanced Therapies and Medical Innovation Sciences (J.ATAMIS, www.j-atamis.org). I (AJSC) am proud to have been chosen as its first editor-in-chief. This journal fills a crucial gap in the literature – and in the cycle of advances in medical science, therapeutics and devices - covering the pipeline from idea through proof of concept studies and start-up funding to regulatory approval. It will be multi-disciplinary and unusually we will have significant input from funders - both angel and venture capital-, start-up CEO’s, and regulators as well as medical scientists and triallists. We have quite frankly a stellar editorial board, with leading lights of biotechnology, medical devices, new and established pharma as well as the “other side”; CEO’s and investors.

The journal, like the world of innovation itself will be proudly multidisciplinary and interdisciplinary, a difficult space to occupy as a start-up. This first issue calls upon the cardiovascular world as its first theme, but are seeing submissions powerfully innovative in fields as diverse as cancer, sleep medicine, eye treatments, coeliac disease, applied mathematics, and biocompatible materials in our pipeline so future issues are as likely to highlight immunology and nanoscience as they are conventional medical organ based specialities.

The world of innovation is grasping the opportunities provided by advances in blue skies research as never before, treatments are increasingly dependent upon on computer programmes, novel materials, nanoscience and delivery systems, robotics, and even fundamental mathematics. The time of day a powerful chemotherapeutic agent is dispensed may determine its toxicology/efficacy balance and this could be turned to advantage by triggered or bio-dependent drug release, targeted at specific cells types within specific organs at specific times of the days or of the cell cycle. Are we seeing the much hoped for magic bullet become targeting drone strikes on the enemy, be it cancer, and infectious invaders or even a dysfunctional and harmful body defence response as part of an age related organ dysfunction. There is a bright future and J. ATAMIS will be there to report it, to analyse, to criticise, and to evaluate. We run an independent journal not subject to vested interests, not subject to political trade-offs or the need to rotate power between constituencies. We promise to be loyal to the research community and the many hard working entrepreneurs, who aim to bring advances to health care as effectively, as safely and quickly as they possibly can. We also take the issue of publishing ethics extremely seriously and demand the highest standards of all our authors, editors and reviewers.¹

The initial issue highlights the cardiovascular area. Once the preserve of enormous mega-trials creating and proving blockbuster drugs that underlie multi-billion dollar sales but costing billions to develop and prove. We are now seeing a new era where devices are developed that are sponsored by small resource-poor companies that do tiny targeted proof of concept studies and try to eke out a financial path to staged and more sequential uptake. There is and will be overlap with devices, drugs, biologics and robotics interacting to treat complex disorders.

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In this see we see articles on just such an approach with a review by Prof Worthley and colleagues as well as original work on electrical and other therapeutic ablation or modification of sympathetic nerve endings (afferent or efferent) in the renal arterial sheath. This therapy initially evaluated for severe hypertension\(^2,3\) is being tested in diverse disorders from heart failure and renal disease to conditions once thought to have little in common with either the sympathetic nervous system or the renal artery.

Another feature we see in our first issue will be a highlight of J.ATAMIS, pithy interesting and illustrative cases in the format of a letter to the editor, encapsulating clinical experience insight and innovation in a very compact form, supplemented by highlights for the busy browser to overview and file away to refer to later. We have articles that are more like what we might expect to see in a physics journal such as computational fluid dynamics, but they are the true life-blood of an innovation journal such as J.ATAMIS. What would a start-up biotech wanting to design and prove a novel ventricular assist device need to know. That remit covers many fields and that could be in, power sources, battery life, anti-clotting surfaces, trial design or indeed the importance of fluid dynamics and its mathematical evaluation.

We cover emerging fields such as the interplay of lung medicine, autonomic control and devices in heart failure, by discussing central sleep apnoea, a Cinderella topic and now a source of major controversy since the unexpected findings of SERVE-HF\(^4,5,6\), recently profiled in our sister journal.\(^7\) There is also a strong computational theme both in therapeutic pump design in the paper by Dr. Roncon and colleagues as well as in diagnostic and physiological evaluation. It as if old fashioned Guytonian physiology is making a comeback to the mainstream because of the need for accurate and targeted physiological evaluation and intervention as we appreciate more the integrated complexity pathophysiological disease processes. Time to brush off both the mathematics and the curiosity of the unknown of our youth again.

Let us finally welcome this new journal to you the readers, and contributors. We aim to help make a difference.

**References**

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