

From Immunology to *‘Ilm al-Manā‘ah*: Toward an Integrated Framework of Science for Islamic Studies

Irwan Hanish^a

Abstract

This article advocates for the integration of Immunology, which is conceived here as *‘Ilm al-Manā‘ah*, into Islamic Studies. We examine how the fragmentation of knowledge introduced by secularisation has relegated natural sciences, including Immunology, to positivist paradigms, neglecting metaphysical dimensions. In contrast, the Islamic intellectual tradition is embedded in a *Tawhīdic* epistemology, which affirms the unity of scientific and theological domains. By tracing the historical interplay between Islamic medicine and theology, *‘Ilm al-Manā‘ah* can enrich the intellectual and psychological dimensions already addressed in contemporary Islamic Studies. We propose that Immunology, with its focus on the body's defence mechanisms, is critical for exploring the often-overlooked biological aspect of the self. We outline a methodological and conceptual framework for integrating Immunology into Islamic Studies. By situating Immunology within a transdisciplinary educational model, *‘Ilm al-Manā‘ah* offers a pathway to reintegrate scientific inquiry into the civilisational aspirations of Islamic intellectual tradition. Ultimately, this integration may train a new generation of Muslim scholars equipped to address contemporary challenges with both scientific rigour and theological depth. In doing so, it reaffirms an enduring Islamic educational legacy that views all knowledge as a means to better comprehend creation and the Creator.

Keywords: *‘Ilm al-Manā‘ah*, Immunology, Integration of Knowledge, Islam and science, *Tawhīdic* epistemology

Introduction

In the broad view of history, the natural sciences and Islamic thought were once deeply integrated. Classical Islamic scholars approached the study of the human body and its ailments as integral to understanding the divine. For them, the scientific study of nature was not divorced from theological inquiry. Instead, it was deeply rooted in an integrated vision that harmonised science and spirituality. This integrative legacy, however, has eroded over time, particularly under the pressures of colonisation and secularisation. As a result, many contemporary Islamic Studies programmes prioritise theological disciplines such as *‘Aqīdah* and *Taṣawwuf*, while relegating biological disciplines such as Immunology to science programmes.

The fragmentation of knowledge introduced by secular educational models has further entrenched this divide. Disciplines such as Immunology are confined to positivist paradigms that isolate scientific inquiry from metaphysical reflection. This compartmentalisation neglects the Islamic intellectual tradition, which thrives on synthesising diverse streams of knowledge under a unifying, God-centric vision. Contemporary university structures, by contrast, frequently treat religious thought as a domain confined to ethics or spirituality, while science disciplines proceed without theological engagement. This separation undermines the epistemological unity that once characterised Islamic civilisation.

^a Irwan Hanish (corresponding author) (PhD), Senior Lecturer, Department of Microbiology, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, Selangor, Malaysia & PhD Candidate, International Institute of Islamic Thought and Civilization (ISTAC-IUM), International Islamic University Malaysia, Kuala Lumpur, Malaysia. Email: irwanhanish@upm.edu.my.

Against this backdrop, we propose to integrate Immunology, which is conceived here as *‘Ilm al-Manā‘ah*, into Islamic Studies. This initiative seeks to revive a *Tawhīdic* epistemology, one that affirms the unity of knowledge under the sovereignty of God. ‘Immunology’ is the empirical study of how organisms recognise harmful changes, coordinate responses, and regulate those responses to preserve balance known as homeostasis.

It aims to explain (i) recognition (how immune systems detect relevant signals and discriminate what warrants response), (ii) response (mechanisms that eliminate pathogens and unhealthy cells), and (iii) regulation (tolerance, resolution of inflammation, and return to baseline). In mainstream biomedicine, immunological claims are explained primarily through observation, experimentation, and reproducibility. Metaphysical questions are typically put aside at the level of method, even when they remain philosophically important. Through this lens, the immune system can be viewed not only as a biological mechanism. It also invites theological reflection on divine wisdom, encouraging a sense of moral responsibility.

The objective of this article is to articulate the epistemological and practical significance of integrating *‘Ilm al-Manā‘ah* into contemporary Islamic Studies. We begin the discussion with an analysis of the historical integration of medical knowledge within Islamic civilisation, followed by an exploration of the impact of secularisation on the intellectual trajectory of Muslim societies.

We then explore the tripartite model of the self: intellectual, psychological, and biological. This exploration leads to the demonstration of how *‘Ilm al-Manā‘ah* completes the framework of an integrative Islamic education. In the ensuing section, we will examine the methodological and conceptual framework for embedding *‘Ilm al-Manā‘ah* in Islamic Studies. Finally, we discuss the practical implications of such integration towards teaching practices and the students as future scholars.

Ultimately, the goal is to demonstrate that the call for *‘Ilm al-Manā‘ah* is neither a superficial attempt at modernising Islamic Studies nor an anachronistic grafting of theology onto contemporary Immunology. Rather, it is a considered approach to reawakening an Islamic intellectual tradition that views all pursuit of knowledge, whether scientific or theological, as an integrated pathway to understanding creation and the Creator.

Historical Integration of Medical Knowledge in Islamic Civilisation

The successful colonisation by European powers transformed the intellectual landscape of Muslim societies. One of its effects is the gradual dissociation of religious thought from the natural sciences.¹ Before this period, Islamic civilisation had an integrated model of scientific inquiry. Medicine, as a discipline, was intrinsically connected to theology. This connection highlights an understanding of the natural world as a reflection of divine creation. It led to a flourishing of knowledge where medical practices and spiritual insights were mutually reinforcing.

This integration took form, especially during the *‘Abbāsīd* era, with the translation of foundational Greek texts by Hippocrates and Galen into Arabic.² These translations catalysed a period of medical innovations. In later centuries, portions of this Greco-Arabic medical corpus were translated into Latin and entered European centres of learning. This historical transmission provides a concrete conduit between classical Islamic medicine and what is now often termed ‘Western medicine’, rather than treating them as disconnected intellectual

¹ John W. Livingston, *The Rise of Science in Islam and the West* (Routledge, 2021).

² Uwe Vagelpohl, “Dating Medical Translations,” *Journal of Abbasid Studies* 2, no. 1 (2015): 86–106.

histories. Such innovations were exemplified by the establishment of *bīmāristāns*.³ These hospitals were not merely treatment centres; they were also research hubs where empirical observations were conducted.

Importantly, the intellectual milieu within these *bīmāristāns* reflected an epistemological harmony.⁴ In *bīmāristāns*, religious scholars and medical doctors collaborated, reflecting the view that the study of the human body was part of a broader theological epistemology. Figures such as *al-Rāzī* (d. 925 CE) and *Ibn al-Nafīs* (d. 1288 CE) personified this intellectual tradition.⁵ *Al-Rāzī's Kitāb al-Hāwī fī al-Ṭibb* ('Comprehensive Book on Medicine') established methodologies for clinical observation that prefigured modern biomedicine. These connections are important for this article's argument because they clarify that the relationship between classical Islamic medicine and modern 'Western' medicine is not merely a rhetorical comparison. It involves both (i) methodological continuities (clinical observation and systematic compilation) and (ii) historical continuities shaped by translation and transmission across civilisational boundaries. These also show that the contributions of traditional medicine in Islamic civilisation were transformative, not merely derivative. Moreover, these contributions arose from an integrated epistemological framework.

This integrated framework presents the role of traditional medicine and its relationship with contemporary biomedicine, which is often colloquially referred to as 'Western medicine'.⁶ The interconnection between classical Islamic medicine and modern biomedicine can be stated in terms of both continuity and discontinuity. There is continuity in institutional and methodological features such as hospitals, clinical observation, and systematic medical writing, alongside historical transmission through translation. There is discontinuity in philosophical framing and research style, especially the later rise of laboratory-centred biomedicine and methodological approaches that avoid metaphysical commitments. To further clarify the words we use, medicine and biomedicine are related fields of study with important differences. Medicine is the practice of diagnosing, treating, and preventing disease. On the other hand, biomedicine is the study of the biological processes and mechanisms of disease.⁷ Biomedicine encompasses many subfields, including Immunology (which we will discuss more later). Both medicines and biomedicines often overlap with each other.

Traditional medicine, as conceptualised by *Ibn Sīnā* (d. 1037) and classified by *Quṭb al-Dīn al-Shīrāzī* (d. 1311), was a branch of natural sciences.⁸ This concept, exemplified by *Ibn Sīnā's al-Qānūn fī al-Ṭibb* ('The Canon of Medicine'), reveals a profound alignment between biology and metaphysics.⁹ *Ibn Sīnā* articulated a view of medicine that interwove empirical analysis with philosophical reflections on the nature of life. With *Ibn Sīnā*, the relationship between

³ Andrew C. Miller, "Jundi-Shapur, Bimaristans, and the Rise of Academic Medical Centres," *Journal of the Royal Society of Medicine* 99, no. 12 (2006): 615–17.

⁴ Ahmed Ragab, *The Medieval Islamic Hospital: Medicine, Religion, and Charity* (Cambridge University Press, 2015).

⁵ Hawa Edriss et al., "Islamic Medicine in the Middle Ages," *The American Journal of the Medical Sciences* 354, no. 3 (2017): 223–29.

⁶ Osman Bakar, "The Concept of a Human Microcosm: Exploring Possibilities for a Synthesis of Traditional and Modern Biomedicine," in *Islam and Biomedicine*, ed. Afifi al-Akiti and Aasim I. Padela (Springer International Publishing, 2022), 63–77.

⁷ Afifi al-Akiti and Aasim I. Padela, eds., *Islam and Biomedicine* (Springer International Publishing, 2022), 2.

⁸ To simplify our language, we use the term 'natural sciences' here instead of the more historically precise term 'natural philosophy'. For our purposes, both refer to the same idea, which is the study of natural phenomena. See Arran Gare, "Natural Philosophy and the Sciences: Challenging Science's Tunnel Vision," *Philosophies* 3, no. 4 (2018): 4.

⁹ Ahmadreza Afshar et al., "Ibn Sina (Avicenna): 'The Prince of Physicians'," *Mayo Clinic Proceedings* 95, no. 3 (2020): e31–32.

biology and medicine is conceptually and practically preserved.¹⁰ The interface between biology and medicine in his synthesis allows us to regard his medicine as a nascent biomedicine.¹¹ In other words, medicine as understood by *Ibn Sīnā* includes what we now understand as biomedicine. Today, biomedicine is a subset of the natural sciences. Its philosophical methodology today is generally committed to reductionism.¹² This approach overlooks the interplay between physiological systems and spiritual dimensions.

Islam's holistic paradigm of biomedicine, which integrates physical health with moral and spiritual well-being, offers a compelling counterpoint to that tendency of modern science.¹³ Such understanding refreshes our civilisational perspective on Islam and science. By examining its epistemological nexus, we may reconsider biomedicine not as a fragmented effort by Muslims separated from Islamic theology. Rather, we can view both biomedicine and theology as a cohesive pursuit of knowledge. For instance, *Ibn Sīnā*'s humoral theory may lack contemporary applicability. However, it has a theological emphasis on balance (*mīzān*) and its integration of psychological and environmental factors with physiology.¹⁴ Such emphases resonate with current interdisciplinary approaches in Islamic education.

A crucial component of this interdisciplinary approach is the integration of the biomedical discipline of Immunology into Islamic education. We will describe Immunology in more detail in the later section '*Ilm al-Manā'ah* in Light of Islamic Education'. At this juncture, Immunology can be simply understood as the science of how our body defends itself.¹⁵ Integrating Immunology into Islamic education can serve as a model for reclaiming the epistemological unity that once defined Islamic thought. For instance, the Qur'anic principle of preserving life (*ḥurmat al-ḥayāt*) highlights a theological perspective of the immunity-infection race.¹⁶ Moreover, the integration of Immunology within a religious framework will have civilisational implications. One of them is the potential for Islamic studies to embrace the natural sciences as an inextricable component of its curricula. Historically, the contributions of *al-Rāzī*, *Ibn Sīnā*, and *Ibn al-Nafīs* demonstrate that medicine was a means to realise the Qur'anic call to preserve life, alleviate suffering, and affirm the divine interconnectedness of all creation.¹⁷ A similar vision could enrich contemporary Islamic studies with natural sciences. It trains a new generation of scholars who are adept at navigating both theological and scientific paradigms.¹⁸

Secularisation and the Evolving Trajectory of Higher Learning in Islam

The fragmentation of knowledge in Muslim societies is a shift away from the integrated intellectual traditions of Islam. It is linked to the historical processes of secularisation.¹⁹ As

¹⁰ Murad Ahmad Khan et al., "Ibn Sina and the Roots of the Seven Doctrines of Preservation of Health," *Acta Medico-Historica Adriatica: AMHA* 13, suppl. 2 (2015): 87–102.

¹¹ Bakar, "The Concept of a Human Microcosm," 63–77.

¹² Mark J. Beresford, "Medical Reductionism: Lessons from the Great Philosophers," *QJM: An International Journal of Medicine* 103, no. 9 (2010): 721–24.

¹³ Bakar, "The Concept of a Human Microcosm," 63–77.

¹⁴ Muhammad Ashfaq, "Scientific Study of Balance (al-Mīzān) in the Light of Sūrah Al-Rahmān," *Journal of Islamic and Religious Studies* 1, no. 1 (2016): 1–12.

¹⁵ The Editors of Encyclopedia Britannica, "Immunology," in *Encyclopedia Britannica*, accessed 5 January 2025, <https://www.britannica.com/science/immunology>.

¹⁶ Irwan Hanish, "The Immunity-Infection Arms Race: An Islamic Philosophical and Educational Perspective," *Afkar: Jurnal Akidah dan Pemikiran Islam* 26, no. 2 (2024): 69–114.

¹⁷ Afshar et al., "Ibn Sina (Avicenna): 'The Prince of Physicians'," e31–32; Edriss et al., "Islamic Medicine in the Middle Ages," 223–29; John B. West, "Ibn Al-Nafis, the Pulmonary Circulation, and the Islamic Golden Age," *Journal of Applied Physiology* 105, no. 6 (2008): 1877–80.

¹⁸ Fuadi Mardatillah et al., "Epistemological Reconstruction of Islamic Education: Developing a Transformative Pedagogical Model to Foster Creativity," *Jurnal Ilmiah Peuradeun* 13, no. 2 (2025): 1071–1094.

¹⁹ Syed Muhammad Naquib Al-Attas, *Islam and Secularism* (Ta'dib International, 2019).

part of the historical secularisation process, the idea of 'unbelief' in God is normalised, laying 'a condition of "having overcome" the irrationality of belief [in God]'.²⁰ To express this differently, secularism lays implicit ideas that sway human beings away from God. These reshape Muslim intellectuals, steering societies away from integrating religion with various domains of knowledge, including the natural sciences.

In the Muslim world, the trajectory of secularisation gained momentum during and after the colonial era.²¹ Colonial powers marginalised traditional madrasah education, replacing it with Western-style institutions. In Muslim societies, secularism enters this space through university academicians when they are 'unduly influenced by the West and overawed by its scientific and technological achievements'.²² Universities, especially in the Global South, restructured their curricula to align with global ranking metrics and institutional performance indicators.²³ This focus led to the prioritisation of narrowly specialised research. Many scientists, while not explicitly propagating secularism, operate within frameworks that see science and religion as separate spheres.²⁴ Simultaneously, natural sciences like Immunology have adopted positivistic methodologies.²⁵ In the philosophy of science, positivistic methodologies refer to approaches that prioritise observable, empirical data and reject metaphysical considerations. This approach is considered 'neutral' and became the dominant educational paradigm in Muslim-majority countries.²⁶

The notion of 'neutrality' in secular epistemologies warrants critical examination. Secular frameworks often omit transcendence and presuppose that valid knowledge derives only from empirical observation or human reason, detached from divine revelation.²⁷ This epistemic outlook reduces Islamic intellectual heritage to a cultural artefact, stripping it of its universal epistemological significance.²⁸ As a result, Muslims who excel in scientific fields frequently may feel compelled to exclude overt references to religion. Theological reflections on scientific findings were once integral to the Islamic tradition. Such reflections are now dismissed as peripheral to the rigour of science.

This shift contrasts sharply with the integrated models exemplified by scholars such as *Ibn Sīnā* and *Ibn al-Nafīs*, where religious principles informed scientific inquiry.²⁹ In their intellectual milieu, scientific advancements were intertwined with theological frameworks. It is reflective of a worldview that saw the study of nature as a means to comprehend divine wisdom. However, colonial and post-colonial state-building initiatives, amplified the secularisation of university curricula.³⁰ These developments institutionalised intellectual bifurcation, encouraging the perception that scientific inquiry inherently aligns with its secularity.

²⁰ Charles Taylor, *A Secular Age* (The Belknap Press of Harvard University Press, 2007).

²¹ Sami Zubaida, "Islam and Secularization," *Asian Journal of Social Science* 33, no. 3 (2005): 438–48.

²² Al-Attas, *Islam and Secularism*, 15.

²³ Jack T. Lee and Rajani Naidoo, "Complicit Reproductions in the Global South: Courting World Class Universities and Global Rankings," in *World Class Universities: A Contested Concept*, ed. Sharon Rider, Michael A. Peters, Mats Hyvönen and Tina Besley (Springer Nature, 2020), 77–91.

²⁴ Elaine Howard Ecklund et al., "Religion among Scientists in International Context: A New Study of Scientists in Eight Regions," *Socius* 2 (2016): 2378023116664353.

²⁵ Yoon Soo Park et al., "The Positivism Paradigm of Research," *Academic Medicine* 95, no. 5 (2020): 690.

²⁶ Al-Attas, *Islam and Secularism*.

²⁷ Steven Kettell, "Secularism and Religion," in *Oxford Research Encyclopedia of Politics*, January 25, 2019, accessed March 24, 2026, <https://doi.org/10.1093/acrefore/9780190228637.013.898>.

²⁸ Osman Bakar, "From Secular Science to Sacred Science: The Need for a Transformation," *Sacred Web* 33 (2014): 25–49.

²⁹ Afshar et al., "Ibn Sina (Avicenna): 'The Prince of Physicians'," e31–32; West, "Ibn Al-Nafīs, the Pulmonary Circulation, and the Islamic Golden Age," 1877–80.

³⁰ Al-Attas, *Islam and Secularism*.

Despite the pervasive influence of secular ideas, growing awareness of their limitations has spurred movements advocating for the reintegration of knowledge. The most well-known attempts today are expressed under the umbrella of the Islamisation of Knowledge which began in earnest in 1977.³¹ The definition of this movement was articulated as ‘the deliverance of knowledge from its interpretations based on secular ideology; and from meanings and expressions of the secular’.³² Over the decades since, it has been developed along with other related paradigms, such as the Islamisation of Science and the Islamisation of Education.³³ The Islamisation of Knowledge initiatives seek to challenge the philosophical underpinnings of secularised education.³⁴ These efforts aim to restore the spiritual dimensions of knowledge production without rejecting the empirical foundations of modern science. Instead, they envision a more complete epistemology that affirms God’s sovereignty and situates scientific inquiry within a metaphysical framework.³⁵

Such calls for reform emphasise the reconnection of natural sciences with theology. It revisits the classical Islamic educational principles which viewed the scientific study of creation as an *‘ibādah*. By revisiting such principles, contemporary scholars can propose pedagogical models that bridge the existing divide.³⁶ Such a vision, in turn, invokes the need to reassess a cornerstone of Islamic civilisation, which is the multidimensional understanding of the self.

Reassessing the Three Aspects of the Self

A hallmark of Islamic civilisation has historically been its integrative conception of the human being. As mentioned earlier, the integration of science and religion was once a defining characteristic of Islamic intellectual culture. This integrated tradition, however, may have waned under the pressures of decades of secularisation. To counter this, the understanding of the self among Muslims is crucial. As mentioned in the Qur’an, ‘Truly God alters not what is in a people until they alter what is in themselves’ (*al-Ra’d* 13:11). In this context, God does not change the condition of society if individuals in that society do not significantly transform themselves. A crucial requirement of that transformation is a comprehensive understanding of the self. Within Islamic Studies, the understanding of the self can be considered in three aspects of the self: intellectual, psychological, and biological.

The first is the intellectual aspect. In Islam, the intellectual dimension of the self is tied to disciplines such as *Kalām* and *‘Aqīdah*. These disciplines train students to examine their beliefs and refine their cognitive capacities. Scholars such as *al-Ghazālī* (d. 1111) exemplify how theological inquiry historically benefitted from logical insights.³⁷ A well-trained intellectual self-grounded in these disciplines will do more than safeguard religion from fallacious challenges. He or she also advances a profound engagement with the world as a manifestation of divine will.

³¹ Muhammad Iqbal, “First World Conference on Muslim Education and Its Possible Implications for British Muslims,” *Learning for Living* 17, no. 3 (1978): 123–25.

³² Syed Muhammad Naquib Al-Attas, *The Concept of Education in Islam: A Framework for an Islamic Philosophy of Education* (Ta’dib International, 2018).

³³ Mohammad Kaosar Ahmed, “Perspectives on the Discourse of Islamization of Education,” *American Journal of Humanities and Social Sciences* 2, no. 1 (2014): 1–8; Ahmad Labeed Tajudeen, “An Eclectic Approach to Islamization of Knowledge: Models and Perspectives,” *International Journal of ‘Umranic Studies* 2, no. 2 (2019): 1–13.

³⁴ Ziauddin Sardar and Jeremy Hanzell-Thomas, *Rethinking Reform in Higher Education: From Islamization to Integration of Knowledge* (International Institute of Islamic Thought, 2017).

³⁵ Syed Muhammad Naquib Al-Attas, *Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam* (Universiti Teknologi Malaysia Press, 1995).

³⁶ Al-Attas, *The Concept of Education in Islam*; Ahmed, “Perspectives on the Discourse of Islamization of Education,” 1–8.

³⁷ Hamid Fahmy Zarkasyi, “Epistemological Implication of Al-Ghazzālī’s Account of Causality,” *Intellectual Discourse* 26, no. 1 (2018): 51–73.

The psychological aspect of the self is similarly well-represented within Islamic Studies. *Taṣawwuf* and certain areas of *Fiqh* have historically guided individuals toward spiritual purification, moral behaviour, and emotional stability. *Taṣawwuf*, in particular, emphasises *tazkiyat al-naḥs* (purification of the soul).³⁸ This purification involves virtues such as patience, gratitude, and sincerity. These qualities are essential for psychological resilience. *Al-Ghazālī* contended that neglecting spiritual discipline undermines a person's broader ability to acquire and apply knowledge.³⁹ Contemporary Islamic Studies curricula support this long-standing focus on introspection. They reinforce the notion that Islamic learning is a holistic endeavour that psychologically shapes personal character.

In contrast, the biological aspect of the self has received comparatively less systematic attention within modern Islamic Studies. This does not mean that Islamic scholarship lacks a substantive discourse on the physical body. *Fiqh* addresses bodily concerns such as purity (*tahārah*), dietary laws, sexual ethics, medical treatment,⁴⁰ and organ donation.⁴¹ Contemporary Islamic bioethics has extended these discussions into modern clinical and policy domains.⁴² The gap we identify here is not the absence of normative guidance.

Rather, it is the often unsystematic engagement within Islamic Studies curricula with the biomedical mechanisms that inform those rulings. As a result, graduates may know legal conclusions, yet remain less equipped to interpret immunological evidence that affects contemporary dilemmas. *'Ilm al-Manā'ah* is proposed as a bridge that strengthens, not replaces, *Fiqh* and Islamic bioethics. It does this by promoting structured literacy in immunity relevant to *Fiqh* and bioethics considerations.

Classical Muslim scholars such as *Ibn Sīnā* and *Ibn al-Naḥs* approached human physiology as an integral component of understanding existence.⁴³ However, the fragmentation of knowledge relegates biological studies such as Immunology to the departments of natural sciences. Understandably, Islamic Studies programmes exclude detailed engagement with such studies. Consequently, compared to the intellectual and psychological aspects, students of Islamic Studies are less equipped to consider how biological processes, especially immunological functions, intersect with religious dimensions of life.

The Qur'an invites reflection on the human body as a sign of God's wisdom, as in the verse: 'And in yourselves; then will you not see?' (*al-Dhāriyāt* 51:21). Such reflections can benefit from Immunology. Among the various biological disciplines, Immunology deals most directly with health, disease, and bodily integrity, which are topics of immediate human concern. When viewed through a theological lens, the immune system can be understood as a divine blessing, encouraging gratitude and humility.⁴⁴ Such reflections offer an avenue to reconnect empirical science with religious frameworks.

³⁸ Che Zarrina Sa'ari, "A Purification of Soul According to Sufis: A Study of al-Ghazali's Theory," *Afkar: Jurnal Akidah dan Pemikiran Islam* 3, no. 1 (2002): 95–112.

³⁹ Mohd Rosmizi Abd Rahman and Salih Yucel, "The Mujaddid of His Age: Al-Ghazali and His Inner Spiritual Journey," *UMRAN - Journal of Islamic and Civilizational Studies* 3, no. 2 (2016): 1–12.

⁴⁰ Ya'arit Bokek-Cohen et al., "The Muslim Patient and Medical Treatments Based on Porcine Ingredients," *BMC Medical Ethics* 24, no. 1 (2023): 89.

⁴¹ Aasim I. Padela and Jasser Auda, "The Moral Status of Organ Donation and Transplantation Within Islamic Law: The Fiqh Council of North America's Position," *Transplantation Direct* 6, no. 3 (2020): e536.

⁴² Aasim I. Padela et al., "Producing Parenthood: Islamic Bioethical Perspectives & Normative Implications," *The New Bioethics* 26, no. 1 (2020): 17–37.

⁴³ Afshar et al., "Ibn Sina (Avicenna): 'The Prince of Physicians'," e31–32; West, "Ibn Al-Naḥs, the Pulmonary Circulation, and the Islamic Golden Age," 1877–80.

⁴⁴ Hanish, "The Immunity-Infection Arms Race: An Islamic Philosophical and Educational Perspective," 69–114.

Moreover, immunological factors significantly influence intellectual and psychological states. Imbalances or immune dysregulation can affect cognitive functions and emotional stability, which are domains explored through *'Aqīdah* or *Taşawwuf*. This highlights the importance of adopting a transdisciplinary perspective that recognises the interdependence of the intellect, psychology and biology.

Reasserting the biological aspect of the self within Islamic Studies has the potential to unify diverse forms of knowledge to better understand God and His creation. This approach does not represent a secular intrusion into religious education. Rather, it is a return to the intellectual legacy of a civilisation that excelled in synthesising various streams of thought. Building on this integrated framework, we propose the science of Immunology, or *'Ilm al-Manā'ah* as an essential avenue to unite the intellectual, psychological, and biological aspects of the self.

***'Ilm al-Manā'ah* in Light of Islamic Education**

In its most basic understanding, Immunology is the biomedical discipline that studies how living organisms preserve bodily integrity.⁴⁵ It explains how the immune system recognises potentially harmful challenges, develops protective responses, and regulates those responses to maintain homeostasis. This includes not only defence against microorganisms, but also against abnormal cells. When immune mechanisms misfire, the same system can produce disease states such as autoimmunity, chronic inflammation, and immunodeficiency.⁴⁶

Of course, this statement is akin to describing *Kalām* as the study of how we use our intellect to defend our *'Aqīdah* against false beliefs. Both descriptions are useful as starting points, but they need more detailed treatment to justify their benefits as parts of Islamic Studies. In the case of Immunology, the most helpful next step is to delineate its subject matter: the immune system. The first point to note is that our immune system does not have a single key organ. It uses most of our organs and cells throughout the body. Many of these organs and cells have biological roles that overlap with other biological systems. For example, the largest immune organ in our body is the skin, which shields us from the majority of harmful substances.

Similar to how the study of *Kalām* contributes to our understanding of *Taşawwuf*, the study of Immunology will contribute to both. One conceptual bridge is the inseparable relationship between our immune system and our nervous system. The biological aspect of the self engages the intellectual and psychological aspects through this bridge. Therefore, the concept of *'Ilm al-Manā'ah*, or 'science of immunity', offers a pathway for reintegrating the biological aspect of the self into Islamic Studies. Today, Immunology is confined within the parameters of secular paradigms. However, as discussed in earlier sections, Islamic epistemological tradition presents a broader framework. Recasting Immunology as *'Ilm al-Manā'ah* allows educators to draw from that tradition which once harmonised empirical observation, philosophical inquiry, and theological reflection.

Historically, Muslim scholars approached the study of the human body as an integral component of understanding both divine wisdom and natural phenomena. *Ibn Sīnā* exemplified this perspective, integrating medicine and metaphysics.⁴⁷ He conceptualised health as a state of equilibrium that mirrored the universal harmony of creation. This approach aligns with contemporary Immunology, which emphasises homeostasis and the dynamic interplay between bodily systems. In a modern educational context, *'Ilm al-Manā'ah* could encompass not only

⁴⁵ The Editors of Encyclopedia Britannica, "Immunology," Encyclopedia Britannica.

⁴⁶ Alan V. Nguyen and Athena M. Soulika, "The Dynamics of the Skin's Immune System," *International Journal of Molecular Sciences* 20, no. 8 (2019): 8.

⁴⁷ Daniel D. De Haan, "Avicenna's Healing and the Metaphysics of Truth," *Journal of the History of Philosophy* 56, no. 1 (2018): 17–44.

the mechanical functions of immune cells but also the spiritual significance of bodily defences. Each microscopic process could be viewed as a divine sign (*āyah*), prompting reflection on God's intricate design. Contemporary neuroimmunology challenges older assumptions that the central nervous system is immunologically isolated. Findings on resident immune cells and immune–nervous system crosstalk support the claim that immunity is biologically linked to cognition and emotion.⁴⁸ This provides a clear bridge for integrating biological insight into Islamic Studies without reducing theological questions to biology.

Reframing Immunology in Islamic terms also addresses the reductionist tendencies inherent in secular research. As noted in earlier sections, reductionism can neglect purpose and spirituality. Conversely, *'Ilm al-Manā'ah* situates the immune system within an integrative vision of human existence. It recognises a link to intellectual and psychological states. For instance, stress has well-documented effects on immune function.⁴⁹ Islamic practices such as *ṣalāh* may bolster immune health by alleviating distress. This integrated viewpoint supports an educational model that bridges empirical science with religious insights.

Overall, the shift from 'Immunology' to *'Ilm al-Manā'ah* is more than a linguistic change. It revives the Islamic intellectual unity that we addressed earlier. This approach does not impose dogmatic constraints on scientific investigation. However, it does seek to align scientific inquiry with spiritual sensibilities. Encouraging a synthesis of rigorous science and profound theology will inspire a new generation of Islamic scholars. This revival aligns with the broader mission to honour both the Creator and creation. In realising the transformative potential of *'Ilm al-Manā'ah*, we must then address key methodological and conceptual challenges that it confronts.

Methodology and Conceptual Framework

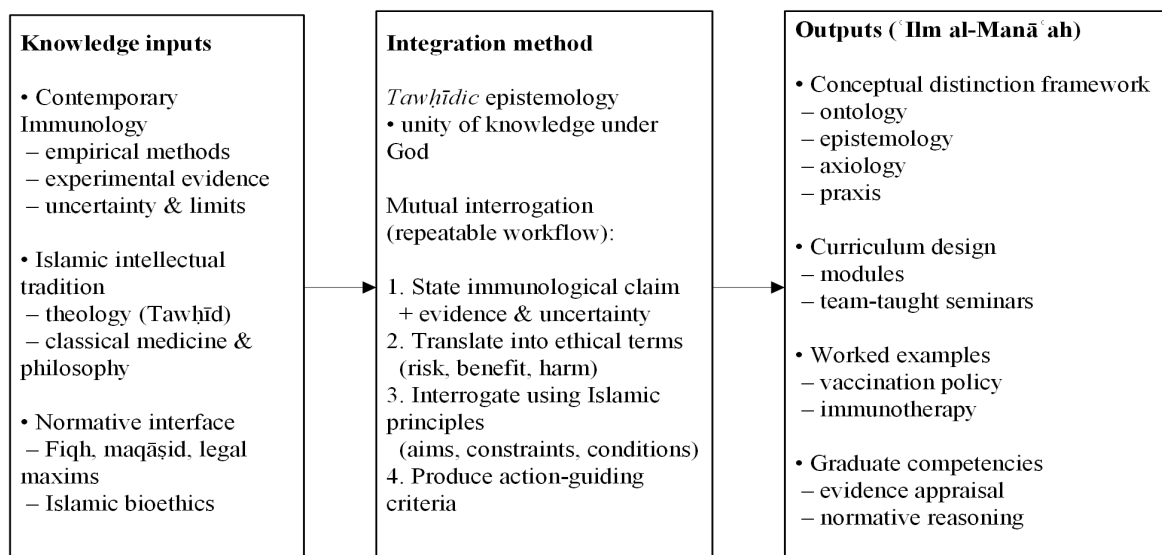
A central premise of this article is the integration of Immunology into Islamic Studies through *'Ilm al-Manā'ah*. This premise raises important methodological and conceptual questions. In this section, the terms 'methodological' and 'conceptual' are employed within the context of epistemology and the integration of *'Ilm al-Manā'ah* into Islamic Studies. 'Methodological' relates to the frameworks that govern how knowledge is generated and validated across scientific and theological domains. This usage moves beyond the classroom teaching methods. Instead, it examines how scientific processes, such as empirical testing, data analysis, and theoretical modelling, can align with Islamic principles of knowledge taught in Islamic Studies.

By contrast, 'conceptual' refers to the foundational ideas that define the intellectual framework of *'Ilm al-Manā'ah*. This includes the explanation of how Immunology, reinterpreted within an Islamic epistemological framework, connects empirical observations with metaphysical insights. To put simply, our focus in this section is not on teaching methods or 'how to teach *'Ilm al-Manā'ah*'. Rather, we focus on the broader epistemological methods of embedding Immunology within Islamic Studies or 'how to think about *'Ilm al-Manā'ah*'. Figure 1 summarises the knowledge inputs, the integration method (*Tawhīdic* epistemology and mutual interrogation), and the intended outputs of *'Ilm al-Manā'ah*.

⁴⁸ Jonathan Kipnis, "Multifaceted Interactions between Adaptive Immunity and the Central Nervous System," *Science* 353, no. 6301 (2016): 766–71.

⁴⁹ Eléonore Beurel, "Stress in the Microbiome-Immune Crosstalk," *Gut Microbes* 16, no. 1 (2024): 2327409.

Figure 1: Methodology and Conceptual Framework for ‘Ilm al-Manā‘ah



Source: Author’s analysis based on the discussion in this paper

The figure summarises (i) the knowledge inputs (contemporary Immunology, Islamic intellectual tradition, and the normative interface), (ii) the integration method (*Tawhīdic* epistemology operationalised through mutual interrogation), and (iii) the intended outputs (a structured conceptual distinction and curriculum/application implications).

Our proposed shift from ‘Immunology’ to *‘Ilm al-Manā‘ah* is not a simple Arabisation of English terminology. It is a proposal for a discipline that retains immunology’s empirical competence while relocating its interpretation, aims, and educational purpose within a *Tawhīdic* worldview. In other words, *‘Ilm al-Manā‘ah* is not ‘Immunology plus theological reflection’ as an optional add-on. It is a reframing that introduces distinct philosophical commitments and practical priorities. The distinction can be stated along four axes: ontology, epistemology, axiology, and praxis.

Ontology (what is taken to be real). Contemporary immunology explains immune phenomena using natural, testable mechanisms. It deliberately brackets or avoids building metaphysical claims into the scientific explanation. *‘Ilm al-Manā‘ah* studies the same biological processes, but interprets them as *āyāt* within creation. It treats the human being as an integrated unity whose biological life is not conceptually sealed off from moral responsibility.

Epistemology (how knowledge is warranted). Contemporary Immunology warrants its claims primarily through empirical methods, including controlled observation, experimentation and reproducibility. *‘Ilm al-Manā‘ah* does not weaken these warrants. It adds a second-order epistemic frame in which empirical findings are situated within *Tawhīdic* epistemology. Within it, reason and revelation jointly constrain how facts are interpreted, taught, and applied.

Axiology (values and aims). Contemporary Immunology can be practised under many value commitments. However, its core theoretical claims are usually presented as value-neutral descriptions. *‘Ilm al-Manā‘ah* makes the normative layer explicit. This is especially important when moving from mechanism to judgement. It connects immunological reasoning to Islamic ethical aims, including the preservation of life, harm reduction, and moral responsibility under God.

Praxis (research, pedagogy, and application). These differences alter what is prioritised in research questions, educational design, and applied decision-making. In a secular setting, the discipline is often oriented toward prediction and intervention. In *‘Ilm al-Manā‘ah*,

intervention is evaluated within a framework that includes spiritual formation. This reshapes what 'competence' means for Islamic Studies graduates engaging contemporary biomedicine.

Another key challenge in establishing *'Ilm al-Manā'ah* lies in reconciling two distinct intellectual legacies. The first originates from contemporary Immunology. It is characterised by laboratory methods and paradigms that rest on reductionist assumptions mentioned in previous sections. The second intellectual legacy is established in the classical Islamic intellectual tradition. It regards the study of the human body as a theological endeavour. Scholars such as *Ibn Sīnā* conceptualised the body's self-regulatory mechanisms as reflections of divine wisdom and ontological harmony.⁵⁰ In contrast, Immunology's reliance on controlled experiments and reproducible findings tends to exclude metaphysical considerations. For *'Ilm al-Manā'ah* to succeed, it must uphold the empirical rigour of contemporary science while embracing the theological depth integral to classical Islamic scholarship.

This is best approached through a *Tawhīdic* epistemology, which affirms the unity of knowledge under the sovereignty of God.⁵¹ Within this framework, empirical and revelatory sources of knowledge are complementary. Scientific discoveries regarding immune cells or cytokine signalling are not seen merely as material phenomena. More than that, they are signs that testify to divine creativity and intentionality.

This dialectical methodology ensures that neither Islamic Studies nor Immunology is engaged superficially. Rather than imposing a doctrinal lens onto scientific data, we advocate for mutual interrogation. By that, we mean constructive dialogues where immunological findings provoke theological reflection, and Islamic principles guide the philosophical dimensions of immunological research. In practice, this procedure involves: (i) stating an immunological claim with its evidential warrant and uncertainties (mechanism, strength of data, and limits of inference); (ii) translating that claim into ethically relevant terms such as risk, benefit, harm, and population effects; (iii) interrogating these terms through Islamic principles to clarify legitimate aims and constraints (what ends are sought, what trade-offs are permissible, and under which conditions); and (iv) expressing the outcome as action-guiding criteria that can inform education, policy consideration, and ethical-legal reasoning without collapsing theology into biology or biology into theology. To make this operational rather than merely a conceptual distinction, Section 7 will provide worked examples that demonstrate how this procedure functions in contemporary cases.

An important step in these dialogues is to highlight *Fiqh* and Islamic bioethics as the normative interface of *'Ilm al-Manā'ah*. A *Tawhīdic* integration must also specify where normative judgement enters and how it is disciplined. In the Islamic intellectual tradition, the principal institutions for action-guidance are *Fiqh*, *uṣūl al-fiqh*, and the developing discourse of Islamic bioethics. In that sense, *'Ilm al-Manā'ah* does not treat *Fiqh* as a peripheral addition. It treats *Fiqh* and Islamic bioethics as the normative interface between immunological description and responsible decision-making. In practice, this interface can be stated as a repeatable workflow: (i) clarify the immunological mechanism and key empirical uncertainties (efficacy, risk profiles, population effects); (ii) appraise the strength and limits of evidence; (iii) map the case to relevant *maqāsid al-sharī'ah* and legal maxims (*qawā'id fihiyyah*), including harm reduction, necessity, and public welfare; and (iv) articulate the conditions and safeguards required for ethical-legal guidance, such as informed consent, proportionality, and equity. This

⁵⁰ Khan et al., "Ibn Sina and the Roots of the Seven Doctrines of Preservation of Health," 87–102.

⁵¹ Osman Bakar, "Towards a Postmodern Synthesis of Islamic Science and Modern Science, the Epistemological Groundwork," *The Muslim 500*, 2020, accessed March 24, 2026, <https://themuslim500.com/guest-contributions-2020/towards-a-postmodern-synthesis-of-islamic-science-and-modern-science-the-epistemological-groundwork/>; Osman Bakar, "The Qur'anic Identity of the Muslim Ummah: Tawhīdic Epistemology as Its Foundation and Sustainer," *Islam and Civilisational Renewal* 3, no. 3 (2012): 438–54.

is one reason the proposed discipline aims to cultivate scientific literacy within Islamic Studies. It is not to replace juristic expertise, but to better inform juristic and bioethical consideration when Immunology is central to the problem.

A significant methodological challenge against this is posed by the historical legacy of Cartesian dualism. René Descartes (d. 1650) raised an ontological divide between material substance (*res extensa*) and thinking substance (*res cogitans*).⁵² In our context, this dualism isolates the human body as a network of biochemical interactions (material substance). It is separated from the human soul (thinking substance). In contrast, the Avicennian conception of the soul (*nafs*) describes it as the principle of life with its various faculties (*quwwah*).⁵³ These faculties regulate bodily and intellectual functions in an integrative way that may reject some logical implications of Cartesian dualism.

Therefore, developing *‘Ilm al-Manā‘ah* requires addressing the philosophical assumptions underpinning Immunology. This includes assumptions that may uncritically exclude metaphysical dimensions. However, this is not a rejection of controlled experiments central to scientific credibility. Instead, it calls for placing these experiments within a worldview that acknowledges deeper layers of meaning. For instance, the immune system’s capacity to distinguish between self and non-self can be interpreted not only as a biological mechanism but also as a reflection of ontology.⁵⁴ It includes the intrinsic order embedded in immunological systems as reflections of divine creation.

At the same time, the immunological inquiry is contextualised within a thoughtful teleological perspective.⁵⁵ Specifically, it aims at the fulfilment of humanity's role in seeking knowledge that reflects divine wisdom and intentionality. This contrasts with purely mechanistic views that focus solely on cause-and-effect relationships without considering ultimate purposes or ends.⁵⁶ That perspective places scientific exploration as part of humanity’s divinely mandated pursuit of knowledge. This approach respects the validity of empirical evidence while recognising that not all dimensions of human existence can be quantified.

The proposed conceptual framework for *‘Ilm al-Manā‘ah* rests on three interrelated pillars. The first is a historical and textual analysis comparing classical Islamic understandings of bodily self-defence with the findings of contemporary Immunology. The second involves a philosophical critique of reductionist premises that constrain scientific inquiry and dismiss metaphysical dimensions. The third pillar is a commitment to *Tawhīdic* epistemology, which seeks to synthesise moral, spiritual, and empirical perspectives into a cohesive understanding of the human self.⁵⁷ By uniting these pillars, *‘Ilm al-Manā‘ah* refreshes an Islamic intellectual tradition that once excelled at integrating diverse fields of knowledge. It also offers a contemporary model where Islam and science coalesce. For example, *‘Ilm al-Manā‘ah* may address epistemological issues related to immunity and microorganisms.⁵⁸

⁵² Tarek R. Dika, “The Origins of Cartesian Dualism,” *Journal of the American Philosophical Association* 6, no. 3 (2020): 335–52.

⁵³ Bakar, “The Concept of a Human Microcosm,” 63–77.

⁵⁴ Martin Žáček, “Ontology or Formal Ontology,” *AIP Conference Proceedings* 1863, no. 1 (2017): 070012.

⁵⁵ James G. Lennox and Kostas Kampourakis, “Biological Teleology: The Need for History,” in *The Philosophy of Biology: A Companion for Educators*, ed. Kostas Kampourakis (Springer Netherlands, 2013), 421–54.

⁵⁶ Marta Halina, “Mechanistic Explanation and Its Limits,” in *The Routledge Handbook of Mechanisms and Mechanical Philosophy*, ed. Stuart Glennan and Phyllis Illari (Routledge, 2020), 213–24.

⁵⁷ Osman Bakar, “Islamic Science, Modern Science, and Post-Modernity Towards a New Synthesis Through a Tawhīdic Epistemology,” *Revelation and Science* 1, no. 3 (2011): 13–20; Bakar, “The Qur’anic Identity of the Muslim Ummah,” 438–54.

⁵⁸ Ivan Hu, “The Epistemology of Immunity to Error through Misidentification,” *The Journal of Philosophy* 114, no. 3 (2017): 113–33; Flavio D’Abramo and Sybille Neumeyer, “A Historical and Political Epistemology of Microbes,” *Centaurus* 62, no. 2 (2020): 321–30; Predrag Slijepcevic, “Evolutionary Epistemology: Reviewing

Overall, in this model, each pillar maintains its integrity while contributing to a holistic comprehension of human existence concerning creation and the Creator. These methodological and conceptual foundations provide a compelling basis for integrating *'Ilm al-Manā'ah* into Islamic Studies. The next logical progression is to consider the practical implications of such integration. In the following section, we examine how *'Ilm al-Manā'ah* can affect teaching practices and shape the students as future scholars.

Practical Implications for Islamic Studies

The integration of *'Ilm al-Manā'ah* into Islamic Studies represents a transformative shift rather than a simple curricular addition. It will lead to many implications for the learning process, and more importantly, to the students themselves. For the learning process, one implication is the reconfiguration of course content to reflect a transdisciplinary approach. Islamic Studies programmes already include foundational courses such as *'Aqīdah*, *Fiqh*, and *Taşawwuf*. They support the understanding of the intellectual and psychological aspects of self. However, these programmes can also benefit from a structured engagement with the biological aspect of self. To incorporate *'Ilm al-Manā'ah* into Islamic Studies, faculties could introduce modules that explore core immunological concepts. They may include topics such as antigen-antibody interactions, inflammation, and innate versus adaptive immunity. These topics, studied not only for their biological relevance but also as *āyāt* (divine signs), would encourage students to marvel at the immune system's complexity as a testament to God's creative wisdom.

To support this integrative content, educators may also reconsider alternative teaching strategies. One strategy could be team-taught seminars, pairing scholars of Islamic theology with trained immunologists. This would be invaluable as it provides dual perspectives for both Islamic Studies lecturers and students. For example, the theologian might contextualise human susceptibility to pathogens within a spiritual framework, while the immunologist explains the cellular mechanisms of defence. Students would be guided to draw connections between classical Islamic texts, such as *Ibn Sīnā's al-Qānūn fī al-Ṭibb* reflections on spiritual health and contemporary immunological literature.⁵⁹ This approach encourages a mutual interrogation in which immunological findings provoke theological reflection, and theological principles inspire a deeper appreciation of scientific phenomena.

To give two concrete examples of mutual interrogation, we will use vaccination policy and immunotherapy. The first clear operational example is vaccination policy. In vaccination policy, immunological evidence intersects with questions of public welfare and moral responsibility. In an *'Ilm al-Manā'ah* seminar, students can be guided through a structured analysis:

- i. Clarify the immunological mechanism (how vaccination induces immune memory and can reduce susceptibility and severity of disease);
- ii. Identify the evidential structure and uncertainty (what endpoints are measured, what is well-established, what is population-specific, and what risks are non-negligible);
- iii. Translate these findings into ethically relevant terms (risk, benefit, harm, protection of vulnerable groups, and collective effects); and
- iv. Deliberate using Islamic principles to clarify legitimate aims and constraints (for example, preservation of life, harm reduction, proportionality, and the ethics of compulsion versus consent).

and Reviving with New Data the Research Programme for Distributed Biological Intelligence,” *Biosystems* 163 (2018): 23–35.

⁵⁹ Izet Masic, “Thousand-Year Anniversary of the Historical Book: ‘Kitab al-Qanun Fit-Tibb’—The Canon of Medicine, Written by Abdullah Ibn Sina,” *Journal of Research in Medical Sciences* 17, no. 11 (2012): 993–1000.

The learning output is not a ‘fatwa in the classroom’, but a disciplined capacity to read biomedical evidence responsibly and to articulate the conditions under which *fiqh* and bioethical reasoning becomes more or less stringent.

The second operational example of mutual interrogation is immunotherapy. In immunotherapy, the intentional immune modulation can result in clinical benefit while also creating serious immune-mediated harms. Here, mutual interrogation can be operationalised by guiding students to:

- i. State the immunological logic of immune modulation in plain terms (enhancing or redirecting immune response);
- ii. Examine how evidence is generated and bounded (trials, patient selection, adverse-event profiles, and limits of generalisation);
- iii. Identify the trade-off structure (expected benefit, probability and severity of harm, reversibility, and long-term consequences); and
- iv. Interrogate these trade-offs through Islamic ethical commitments to responsibility, dignity, and harm prevention.

Importantly, this case demonstrates that *‘Ilm al-Manā‘ah* does not merely ‘add theology’ to a finished scientific picture. It reconfigures what counts as an adequate application of scientific knowledge, because the evaluation criteria include explicitly normative constraints rather than purely technical optimisation. Given different learning outcomes, *‘Ilm al-Manā‘ah* materials for Islamic Studies should prioritise conceptual literacy and ethical-legal reasoning over laboratory-based competencies typical of medical immunology.

Overall, integrating *‘Ilm al-Manā‘ah* into Islamic Studies represents a forward-thinking step towards a more integrative understanding of human complexity. Within this understanding, the intellectual, psychological, and biological dimensions collectively inform one’s relationship with God.⁶⁰ Targeted curricular adjustments can be considered, such as embedding immunological principles alongside disciplines like *‘Aqīdah*, *Fiqh*, and *Taşawwuf*. The objective extends beyond the mere transmission of scientific knowledge. It seeks to initiate a transformative learning journey that harmonises scientific inquiry with theological reflection.

Conclusion and The Future of *‘Ilm al-Manā‘ah*

In light of the analysis presented in this article, it is evident that integrating Immunology into Islamic Studies, which is conceptualised as *‘Ilm al-Manā‘ah*, is more than just a novel academic experimentation. Instead, it is a deliberate revival of the intellectual principles that have characterised Islamic civilisation. *Ilm al-Manā‘ah* provides a promising framework for re-establishing this unity in contemporary higher education. By embedding foundational immunological concepts within curricula that already include *‘Aqīdah*, *Fiqh*, and *Taşawwuf*, Islamic Studies can educate students who view immune health not only as a biological mechanism but as a source of theological analysis. This perspective aligns the pursuit of health with the Qur’anic imperative to reflect on creation. Furthermore, the practical implications of this integration extend into the realm of ethical decision-making. It equips graduates with the skills to navigate contemporary challenges such as immunotherapy, vaccination policies,⁶¹ and biomedical technologies through the lens of both theological principles and scientific methodologies.

⁶⁰ Che Zarrina Sa’ari et al., “Aplikasi Biopsikososial-Spiritual Untuk Bekas Penagih Dadah Bagi Mengelakkan Relapse: Perbincangan Kumpulan Fokus,” *Jurnal Usuluddin* 53, no. 1 (2025): 55–74.

⁶¹ Muhammad Haaris Tiwana and Julia Smith, “Faith and Vaccination: A Scoping Review of the Relationships between Religious Beliefs and Vaccine Hesitancy,” *BMC Public Health* 24, no. 1 (2024): 1806.

Looking ahead, the successful implementation of *'Ilm al-Manā'ah* depends on several factors. First, educators must collaborate to develop teaching materials that are accessible to students who are future Islamic scholars. Second, interdisciplinary research networks will be essential for refining the epistemological foundations of *'Ilm al-Manā'ah*. It ensures that this new discipline retains academic rigour while remaining firmly embedded in Islamic theology. Finally, institutional support will play an important role to normalise the integration of *'Ilm al-Manā'ah* within Islamic Studies programmes.

Collectively, these efforts underscore the overarching aim of *'Ilm al-Manā'ah* to reaffirm the Islamic intellectual tradition that perceives no dichotomy between scientific inquiry and theological scholarship. By embracing the intellectual, psychological, and biological aspects of the self, Islamic higher education has the potential to chart a renewed path. In this vision, students are equipped to advance scientific and theological understanding and, in time, serve the Muslim civilisation through a cohesive framework of knowledge founded in *Tawhīd*.

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