Visions and the Progress of Science

In 1989 Charles A. Janeway gave a pioneering speech at the Cold Spring Harbor Laboratory Symposium where he discussed his ideas about an innate immune system [1]. In this talk, he predicted the existence of pathogen-associated molecular patterns and, when speculating about the nature of such microbial substances, he concluded: “What kind of ligands or patterns should such non-clonally distributed receptors recognize? I think it is likely that such patterns in molecules are found in many microorganisms... Complex cell wall carbohydrates or lipopolysaccharides are likely ligands” [1]. About 10 years later his prevision was proven to be correct when Bruce Beutler and his team described for the first time that bacterial lipopolysaccharides bind toll-like receptor 4 [2]. Today, we know that Charles A. Janeway’s lecture was the birth of a new era, now referred to as innate immunity, and thanks to his prediction we were able to launch this journal in 2008. However, more than 25 years after that speech and at a time when people are discussing the advantage of fake news and alternatives facts, one tends to forget that visionaries are often responsible for switches in paradigms. This also applies to the scientific world and, therefore, there has to be a platform where new ideas and concepts can be presented. Open access journals have dramatically changed the publishing landscape within recent years and led to an overflow of articles. As a conse-

quence, it is becoming difficult to identify those articles where authors are presenting their visions or concepts. It is the aim of the *Journal of Innate Immunity* to publish particular articles that address novel approaches or challenge old theories. To achieve this goal, we are dependent on a traditional peer review process involving a competent editorial board that shares our point of view. To this end, the journal publishes contributions which are not mainstream, such as articles dealing with invertebrate immunology [3–6] or with exotic and uncommon pathogens [7–11], for instance. Along these lines, we also publish articles about exceptional researchers (e.g., Elie Metchnikoff [12] and Paul Ehrlich [13]) and their visions, as well as important milestones within the field of innate immunity [14]. The *Journal of Innate Immunity* will celebrate its 10th anniversary next year. So far, we have been very successful with our strategy and thus we will continue with this traditional approach of scientific publishing in the future. Max Planck once concluded that new concepts can only become implemented when the protectionists of the existing outdated theories have died. This is hopefully no longer the case, and therefore we encourage visionaries to use the *Journal of Innate Immunity* as a forum to spread their views and ideas.

Arne Eggesten, Lund
Heiko Herwald, Lund

References

- 1 Janeway CA Jr: Approaching the asymptote? Evolution and revolution in immunology. Cold Spring Harb Symp Quant Biol 1989;54: 1–13.
- 2 Poltorak A, He X, Smirnova I, Liu MY, van Huffel C, Du X, Birdwell D, Alejos E, Silva M, Galanos C, Freudenberg M, Ricciardi-Castagnoli P, Layton B, Beutler B: Defective LPS signaling in C3H/HeJ and C57BL/10ScCr mice: mutations in *Tlr4* gene. Science 1998;282: 2085–2088.
- 3 Dantoft W, Lundin D, Esfahani SS, Engstrom Y: The POU/Oct transcription factor Pdm1/nub is necessary for a beneficial gut microbiota and normal lifespan of *Drosophila*. J Innate Immun 2016;8:412–426.
- 4 Kamareddine L, Nakhleh J, Osta MA: Functional interaction between apolipoproteins and complement regulate the mosquito immune response to systemic infections. J Innate Immun 2016;8:314–326.
- 5 Kucerova L, Broz V, Arefin B, Maaroufi HO, Hurychova J, Strnad H, Zurovec M, Theopold U: The *Drosophila* chitinase-like protein IDGF3 is involved in protection against nematodes and in wound healing. J Innate Immun 2016;8:199–210.
- 6 Pees B, Yang W, Zarate-Potes A, Schulenburg H, Dierking K: High innate immune specificity through diversified c-type lectin-like domain proteins in invertebrates. J Innate Immun 2016;8:129–142.
- 7 Braem SG, Rooijackers SH, van Kessel KP, de Cock H, Wosten HA, van Strijp JA, Haas PJ: Effective neutrophil phagocytosis of *Aspergillus fumigatus* is mediated by classical pathway complement activation. J Innate Immun 2015;7:364–374.
- 8 Carlsen ED, Jie Z, Liang Y, Henard CA, Hay C, Sun J, de Matos Guedes H, Soong L: Interactions between neutrophils and *Leishmania braziliensis* amastigotes facilitate cell activation and parasite clearance. J Innate Immun 2015;7:354–363.
- 9 Lafferty EI, Wiltshire SA, Angers I, Vidal SM, Qureshi ST: *Unc93b1*-dependent endosomal toll-like receptor signaling regulates inflammation and mortality during coxsackievirus B3 infection. J Innate Immun 2015;7:315–330.
- 10 Terasaki K, Makino S: Interplay between the virus and host in rift valley fever pathogenesis. J Innate Immun 2015;7:450–458.
- 11 McCracken JM, Kinkead LC, McCaffrey RL, Allen LA: *Francisella tularensis* modulates a distinct subset of regulatory factors and sustains mitochondrial integrity to impair human neutrophil apoptosis. J Innate Immun 2016;8:299–313.
- 12 Gordon S: Elie Metchnikoff, the man and the myth. J Innate Immun 2016;8:223–227.
- 13 Valent P, Groner B, Schumacher U, Superti-Furga G, Busslinger M, Kralovics R, Zielinski C, Penninger JM, Kerjaschki D, Stingl G, Smolen JS, Valenta R, Lassmann H, Kovar H, Jager U, Kornek G, Muller M, Sorgel F: Paul Ehrlich (1854–1915) and his contributions to the foundation and birth of translational medicine. J Innate Immun 2016;8:111–120.
- 14 Doolittle RF: Some important milestones in the field of blood clotting. J Innate Immun 2016;8:23–29.