DOCTOR IN SCIENTIIS

Gervasius Andreas Miesenböck

Illustriorem quidem candidatum ad vos non produxerim, sodales, quam GERVASIUM ANDREAM MIESENBÖCK, Sodalem Regiae Societatis, qui summa auctoritate praecepta scientiae physiologicae discipulis doctisque impertit apud Universitatem Oxoniensem, ut studia quaedam micantia promoveat ad particulas minutissimas cerebri earumque facultates moresque. Ipse ἀπτογενετικήν dixit novissimam artem, verbis a Graeco sermone usurpatis quibus apte adponatur vis visifica origini ipsi animalium ad utrasque acerrime indagandas. Nam ab eis primordiis corporis quae nervos Latine, proprius Graece neurones dicimus, animi motus ac mutationes omnes oriuntur, quarum quasi signa dant scintillantia. Quae arcana rerum naturae scrutatur, dum quaerit unde aliquid faciendi aut non faciendi excogitetur ratio, vel quo suavi, immo miro sopore somnus membra cotidie devincat - audaci et una purissima ratione: cum satis constet nervos electricitate temptatos scintillas emittere, quo modo regantur ut emittant ut non? 'Optice', ait candidatus noster, scalpello tandem deposito: ecce respondent nervi radiis opticis, ecce in apertum patent mores et mentis et corporis, ut curiose examinati ad bonum facilius derigantur. Nonne creditis, sodales? An potius somnia Luciani quam veritatem a Lucretio lucide expositam inhabitare videtur Gervasius ille Japonicus, tam vitricerebrus quam cerebrosus, improbus ac superbus, quem candidatus quasi Sosiam sibi iactare solitus est? At pari ingenio, pari audacia salutem petit vir noster, quem equidem contenderim philosopho illi Bononiensi, qui primus vires electricitatis in motu musculari multis experimentis detectas publici iuris fecit, ut occultae nervorum facultates in apertum, si fieri posset, ponerentur, et eorundem morbis tutius mederi posset; qui experimentorum vero narrationi corollaria nonnulla, nonnullasve coniecturas, et hypotheses adiunxit ut novis capiendis experimentis viam sterneret aliquam, qua sin minus ad veritatem pervenire posset, novus saltem ad eamdem aditus aperiretur (Luigi Galvani, De viribus electricitatis in motu musculari, 1791). Haud aliter viam experiendi novissimam monstrat candidatus noster, qui rerum principiis indagandis honeste delectatus qualiacumque inventa diligenter et studiose aperire solet. Num decoribus permultis summum illud tandem adiecitur? Sed iam nimis audeo, iam scintillas video; cedat tandem oratio acclamationi sonorae.

DOCTOR IN SCIENCE

Gero Andreas Miesenböck

Illustrious - an originally Latin word for 'lighted, bright, brilliant' - is the perfect adjective for our next candidate. I am proud to give you GERO ANDREAS MIESENBÖCK, FRS, Waynflete Professor of Physiology and founding Director of the Centre for Neural Circuits and Behaviour at the University of Oxford. We owe him a new field of science, which he called optogenetics, or: controlling the brain with light. In the firm belief that psychological activity has a physiological basis, he interrogates brain cells to unlock the causes, the connections, and the mechanisms of mental life our perceptions, our emotions, our memories, our plans for the future. The questions he tackles are daring. What happens in the brain during decision-making processes? What happens during sleep, 'one of the greatest biological mysteries'? His method is both revolutionary and wonderfully simple in its concept. We know that neurons fire electrical signals and have conductive properties. Now, can't electricity be switched on and off? Here is the principle of optogenetic control: neurons can be genetically programmed to respond to light, which works as a remote control to activate them or silence them; we can then observe how the patterns of neural activity in the brain affect psychology and behaviour. This is not science fiction, although he claims to have a Doppelgänger in Dr Gero, the mad scientist of Japanese cartoons, who is endowed with a brain open to optical control and with unbound confidence in the success of his technological creations. Unlike his fictional namesake, our neuroscientist is everything but a villain. His experiments have provided effective tools to understand how the brain works, and opened avenues of hope for treating neurological disorders and diseases. His scientific curiosity and moral fibre rather remind me of someone else-the man who first discovered the connection between electricity and life. Publishing his findings, that pioneer had no other desire than that 'the concealed properties of nerves and muscles might be revealed, that we might be able more surely to heal their diseases'; to the description of his experiments he added his conjectures and hypotheses, 'with the purpose of smoothing the way for understanding new experiments, whereby, if we cannot attain the truth, at least a new approach thereto may be opened' (Luigi Galvani, Commentary on the Effects of Electricity on Muscular Motion, 1791). In similar vein, our neuroscientist does not claim an ability to unravel all the mysteries of the nervous system, but has certainly succeeded in opening a radically new pathway. We are in the presence of a true scientist: a puzzle-solver, a code-breaker, and a generous and enthusiastic communicator of his discoveries, for which he has been awarded prestigious prizes across the world. But already your mind has sent electric signals to your hands: let my oration yield to your applause.

DOCTOR IN SCIENTIIS

Georgius Kildare Miley

'Ea perspicilli beneficio adeo ad sensum licet intueri, ut et altercationes omnes, quae per tot saecula philosophos excruciarunt, ab oculata certitudine dirimantur, nosque a verbosis disputationibus liberemur' (Sidereus Nuncius, 1610). Sic gloriabatur Galileus doctus, cum primum galaxiae sibi manifestatae essentiam sensuit, et, quod omnem admirationem longe superavit, quattuor erraticas stellas, ut dixit, nemini eorum qui ante nos cognitas aut observatas, adinvenit. Quandringentis ab illo tempore annis, innumeras nos cum scimus esse galaxias, perspicillis validioribus repertis ad caerula templa scrutanda, stupemus tamen admiratione novissimi cuiusque inventi atque inventoris felicis. Talis est GEORGIUS KILDARE MILEY, iam discipulus collegii Jesuitici apud Dublinum, nunc philosophus fortissimus aetatis nostrae, Astronomus Emeritus de Universitate Lugdunensi Batavorum, Sodalis Regiae Astronomicae Societatis honoris causa, Eques Auratus a virtute Leonis Nederlandici nobilitatus. Huic primo, fere adulescenti, candidus Cygnus videbatur radiis quasi alite digito monstrare plana caeli gravissima unde ne luci quidem exitus datur. Ab illo die fausto perspicillis acrioribus caeli plagas scrutatur, si usquam emittantur radii signiferi astri cuiusdam nascentis. Ut vero magistrum sapientem decet, non solum quaecumque sibi inventa diligenter nuntiavit, quingentis fere libellis editis, sed etiam studia astronomiae adeo promovit ut specula illa Lugdunensis nobilissima fieret in Europa. Nec utili communi operam dare neglexit, quippe qui assiduis observationibus caelestis didicerit foedera naturae, certis velut legibus obstricta, nullo discrimine omnibus esse exemplo ordinis naturalis pulcherrima. Placuit igitur viro sapienti, quondam duci Collegii Universi Astronomici, ut a prima puerili aetate mentes educerentur ad sidera observanda eorumque rationes. Quo clarius sidera oculis spectanda sese offerrent, novissimum genus perspicilli instruxit, cuius exemplar ingens apud Biorram spectamur pari stupore ac solstitium brumale ad Boinne ripas. Nec haec finis est admirationis. Cum stellula nova nomen candidati nostri accepit, eum recepit civitas supera, ubi fulgent Thales et Anaximander, Parmenides et Empedocles, Xenophanes et ceteri omnes qui primi caeli convexa tuentes inquisivere rerum naturam. Hoc tantum restat, sodales, quod clamores et laudes laeti tollamus ad sidera caeli.

DOCTOR IN SCIENCE

George Kildare Miley

'By the aid of a telescope anyone may behold this in a manner which so distinctly appeals to the senses that all the disputes which have tormented philosophers through so many ages are exploded at once by the unquestionable evidence of our eyes, and we are freed from wordy disputes upon this subject.' With these words Galileo announced his direct experience of the galaxy and his discovery of 'four erratic stars, neither known nor observed by anyone of the astronomers before my time' (The Herald of the Stars, 1610). Over four hundred years later we know that galaxies are innumerable, and we have acquired powerful instruments to describe celestial objects; and yet no less astonishing is a discovery nor less pride do we take in the discoverer. The Dubliner who stands before you today, once a Gonzaga boy, is one of the greatest astrophysicists of our times. It is a privilege to welcome GEORGE KILDARE MILEY, Emeritus Professor of Astronomy at Leiden University, Honorary Fellow of the Royal Astronomical Society in the United Kingdom, and Knight of the Order of the Netherlands Lion. Early in his phenomenal career, he was one of the scientists who detected radio emission from Cygnus X-1: the Swan in the Milky Way revealed to him the first black hole ever observed. His studies since then, published in more than five hundred research papers, have focussed on distant radio sources, and combined radio and optical data to show that these distant objects pinpointed regions of star formation in young galaxies. When he was Scientific Director of Leiden Observatory he promoted undergraduate teaching, thus transforming the Observatory into one of the largest and most productive astronomy departments in Europe. But his concerns range beyond academia. Astronomy is a perfect tool for education of people of all ages and social backgrounds: we are all equal under the sky. From this belief springs his Universe Awareness programme for young children, and the 'Astronomy for Development' programme, which he designed when he was Vice-President of the International Astronomical Union. His studies initiated the revolutionary telescope LOw Frequency ARray (LOFAR), which allows millions of people to explore the universe from stations spread across Europe: go to the Irish station at Birr Castle, and marvel at a miracle as magnificent as Newgrange. When Asteroid 6202 Georgemiley was thus christened in 2003, this scientist joined Thales and Anaximander, Parmenides and Empedocles, Xenophanes and many others in the bright constellation of minor planets named after the founding fathers of Western science. On this joyful occasion, it is appropriate to raise your sound of approval to the stars of heaven.

DOCTOR IN LITTERIS

Catarina Crowe

Consideranti mihi res gestas candidatae illustris venit in mentem quam usui civibus Romanis fuerit ille Asinius Pollio, sodalis Catulli, Horatii, Vergilii, idemque scriptor et carminum et rerum gestarum populi Romani, defensor intrepidus libertatis, quod primus bibliothecam publicavit in Urbe, imaginibus positis omnium mortalium quorum immortales animae in locis iisdem loquebantur (Plin. N.H. 7.115). Stirpis vero Hibernicae ingenia rem publicam fecit CATARINA CROWE, sodalis Regiae Academiae Hibernicae, quae tanta virtute ac diligentia acta rei publicae indagavit, ut iure sit appellata custos et Lar rerum gestarum Hiberniae recentioris. In aedibus undique patentibus eius bibliothecae ipsa posuit effigies mulierum quaecumque tacitae patientes maerentes de patria meruerint, vix ulla memoria servata, nisi quae eximia cura atque pietate possit revocari; adiunxit autem simulacra pugnantium pro libertate, quos morte immatura rapuere horrida bella plura quam quae honeste dicere possim. Ministram spectamus fidelem Clius Hibernicae, custodem assiduam memoriae maiorum, fautricem indefessam actis publicis servandis. Quorum studia mire promovit curatrix Bibliothecae Nationalis Hibernicae, utroque saeculi praeteriti incipientis censu civium liberaliter edito, rebus gestis mulierum summa virtute compositis; adiuvantibus doctis Academiae Regiae Hibernicae nec non ministris rebus externis praepositis decem tota volumina implevit actis publicis ad res externas pertinentibus; deinde acta militaria eorum temporum publice edidit nec non, quod nuperrime factum est, quaecumque inveniri possit de salario militiae-quae omnia magna sunt documenta inclutae aetatis et tumultuosissimae. Dum patria in libertatem vindicata commemoratur, ferventer hortatur candidata nostra ne ulla ira, ullum studium nos a vero avertat, talia profata: Utinam nobis demum placeat aetatem hanc sollemnem agentibus numquam gratia moveri, funestum furorem fraternae necis dissolvere, superba denique arma honesto pudore deponere!' Ut decet cultricem memoriae in litteris versatam, vatis illius superstitis antiquo bello civili dicta iure usupet: 'parumne campis atque Neptuno super fusum est Hiberni sanguinis?' Responsum certum date, sodales, piissimae hospiti et maxime dignae gratulatione.

DOCTOR IN LETTERS Catriona Crowe

As I consider the achievements of our candidate, I find myself recalling that the first public library at Rome was created by the historian Asinius Pollio, friend of the greatest poets of his time, an independent mind who feared no authority. He had the library adorned by the effigies of all the immortal spirits whose records inhabited the place. This country's archives have become accessible to the people through the passionate work of CAITRIONA CROWE, MRIA, the champion of Public History in Ireland. Whose effigies adorn this woman's democratic, inclusive repository? No doubt, the portraits of the women who have made Irish history, silently and enduringly, whose voices may only obliquely be heard through a careful retrieval and respectful release of our records, would hold a place of honour. No doubt, the likenesses of all those who defended their freedom in the far too many conflicts fought on Irish soil. Our country finds no stronger advocate of fairness, respect, and historical truth than this formidable archivist and activist. In a life-long commitment to archival research and social change, she has powerfully demonstrated that the strongest foundation of a fairer future lies in the unbiased and responsible analysis of our past. She has embraced that responsibility splendidly, becoming a leading authority on the State's modern records. We have admired her as the Head of Special Projects at the National Archives of Ireland; as the Manager of the Irish Census Online Project, which has made the 1901 and 1911 censuses freely available to the public; as the President of the Women's History Association – to name but a few examples of her deep engagement with Irish history. Working with the Royal Irish Academy, the Department of Foreign Affairs and Trade, and the National Library, she has played a crucial role in the publication of *Documents* on Irish Foreign Policy, which have now reached their tenth volume. No less vital was her part in the government's decision to release first the records of the Bureau of Military History, and subsequently of the Military Service Pensions, all invaluable documents for the reconstruction of the lives of those who served in the War of Independence and in the Civil War. In this decade of commemorations, she looks History in the eye and urges us to do the same, saying: 'I am hoping that we do not go through these years with a soft-centred aspiration to please everyone; I am hoping that we can relate our violent origins as a state to the endemic violence in our society, and interrogate both; and I am hoping that, in spite of the hubris of individuals, we can all take part in some honest self-examination and really, truly repudiate violence as a means to any end.' A fine reader and critic of poetry, she may easily be echoing the words of the survivor of another civil war (cf. Horace, Epode 7.3-4) and say, 'Hasn't enough Irish blood been shed on land and sea?' Our answer will be as resolute as the tribute of our respect and admiration.

DOCTOR IN UTROQUE JURE

Brianus Gerardus O'Driscoll

τόλμα γὰρ εἰκώς θυμὸν ἐριβρεμετᾶν θηρῶν λεόντων ἐν πόνῷ, μῆτιν δ' ἀλώπηξ, αἰετοῦ ἅ τ' ἀναπιτναμένα ῥόμβον ἴσχει. (Pind. *Isth.* 4.44-7)

Talibus dictis vates Thebanus carmen epinicium solvebat viro nobilissimo pancratio victori. Ouid vos, cives Hibernici, quid vobis est pancratium? Ouis vobis fortissimus leo, quis vulpis astuta, quis victor $\sigma\theta$ ένει τ' ἕκπαγλος ίδεῖν τε μορφάεις? Τίνι τῶν καλῶν έπιγωρίων μάλιστα θυμόν τεόν εὕφρανας (Isthm. 7.22, 2)? Iam fervidis vocibus acclamatis BRIANUM GERARDUM O'DRISCOLL, athletam plus quam humanae fortitudinis. Fortiorem enim quemquam numquam vidit Hibernia, vix fere orbs terrarum, tam frequenter certamina ingredientem impetum facere, sive praecipitem sive ex transverso, et pilam ovalem in victoriam traducere: Hercules est, non homo. Qui est vestrum quin meminerit diem faustum, quo ille adulescentulus triplicem impetum feliciter fecit in Gallos fortissimos? Vel illo pol die quo quasi salienti cursu contigit metam Australem optatam una cum victoria universa? Nonne obstupuistis, Dublinienses, cum pilam ovalem nuperrime iactam ipse volitans rapuit volitantem? Sed quid est mirandum? Nec enim ardua nec aspera metuit, sed (si fautoris cuiusdam verba usurpare licet) potius saepissime petit quasi divina virtute. Ad numeros venio. Certaminibus CXLI initis, saepissime comes Hibernicus, nonnumquam acerrimus Leo, adversariis undique stratis confusis devictis, quattuor coronas rettulit triumphales, primus in primis sex cunctarum nationum; ternis palmis auratis, quaterna lauro ornatus est. Innumerae autem ei sunt virtutes - ingenium versatile, mores modesti atque honesti, animus impavidus et pugnax non minus adversariis quam rebus adversis. Alii aliter bene merent de patria; hic athleta fortis atque fidelis, quindecim tandummodo annos a ludis puerilibus ad amphitheatrales honores, tantae gloriae fuit patriae universae quantae victor vetustus Graecae civitati. Negotiis athleticis iam depositis, otia piissima pugnaciter sequitur ubicumque possit. Quem Civitas Dubliniensis appellavit defensorem libertatis, Universitas corona laurea libenter ornabit Doctorem in Utroque Jure.

DOCTOR IN LAWS

Brian Gerard O'Driscoll

He resembles the boldness of loudly roaring wild lions in his heart during the struggle, but in skill he is a fox, which rolls on its back to check the eagle's swoop. (Pindar, *Isthmian Odes* 4.44-7)

The Greek victory ode celebrated a champion in the pancration, the 'game of all power'. What is your 'game of all power', my friends? Who is your bold Lion, your skilled fox, your champion 'awesome in strength and handsome to behold'? 'In which of your land's glories did your heart take most delight?' (Pindar, Isthmian Odes 7.22; 2)? Your reply will be a roaring acclamation to BRIAN GERARD O'DRISCOLL, a sportsman of superlatives: he is the most capped rugby player in Irish history and the second most capped in world history, the highest try scorer in Irish rugby, the highest scoring centre of all time, the holder of the Six Nations record for most tries scored with 26. His feats on the sport field have been described as Herculean, sensational, world-class. Who can forget the 'hat-trick' on his debut in Paris, against a celebrated French side at Stade de France? Or the waltz he danced into victory at the World Cup in Melbourne? Who can forget the astonishment in the Magners League game against Ulster, when Lansdowne Road saw him pass the ball to himself? If you ask how he did all that he did, I will reply with the words of a special fan: 'he assaults the impossible in a quest to reach the upper slopes of human endeavour.' In his star-like career he has played 141 test matches, 133 for Ireland, of which 83 as captain; and 8 for the British and Irish Lions. His Crowns – four of which Triple – also include a Grand Slam title, three Heineken Cups and four Pro-12 Championships. His fans recognise in him all the qualities of a perfect hero: genius, modesty, bravery, courtesy, sportsmanship, creative flair, unrelenting determination and positive temperament under pressure, self-discipline and ability to respond to the challenges and vicissitudes of living. Service to one's country take different forms. The unforgettable former captain of the Irish Team and of Leinster Rugby has certainly served his country well. In the agonistic world of the ancient Greek poet, an individual's victory in the games was the triumph of his entire city, his family, his ancestors. In the course of more than fifteen years of excellence, from his early days at Blackrock College to the Pro12 Grand Final at the Royal Dublin Society in May 2014, this champion has instilled a great sense of pride in the Irish nation. He has hung his boots, but not his brave heart, continuing to champion humanitarian work at home and abroad. Our city awarded him the title of Freeman of Dublin; this University will be proud to crown him Doctor in Laws.

DOCTOR IN UTROQUE JURE

Olivia O'Leary

Scribendi recte sapere est et principium et fons. (Hor. Ars Poetica 309)

Candidata quae ultima in podium procedit sapienter dicere solet non multum interesse, si optimos scribas cottidianos legas an poetas, nam idem petere et hos et illos, veritatem. Priusquam a facie familiari gratissimaque, a candida eloquentia laeti iam agnoscimus nuntiam tenacissimam veri OLIVIAM O'LEARY. Nostrae aetatis annales ab adulescentia fideliter redegit, causis rerum quaesitis diligenti constantia, animo puro, stilo veraci, voce clarissima – voce, imquam, nam eius commentarii vel radiophonici vel televisifici tam ingenui, tam assidui audiebantur, ut veritatem ipsam loquentem putares. Itinere quodam aetherio persaepe confecto ab Urbe utriusque insulae nostrae, quadraginta fere per annos ad nos venire solebat, hospes et quasi conviva vespera, ut sermones nobiscum comiter consereret, ut fideliter referret contionum contentiones disceptationesque senatus vel qualescumque congressus habuisset cum primoribus nationum ducibusque acerrimis. Modo perfuncta munere maestissimo horridas clades narrabat, dum infando cruore spumant hic arva turbata Hiberniae Septentrionalis, illic violatae insulae Atlantis Meridionalis, dum Scythica urbs miserrima flammis consumitur; modo nobiscum gaudebat quidquid feliciter evenerit: nonne nuper eam vidimus laetam atque lepidam in conspectu regina Elizabetha? Omni genere loquendi ac scribendi praestantem praemiis decoravere docti per orbem; ipsa tamen ait se maxime diligere familiaritatem radiofonicam, qua ingenia, non personae exhibeantur. Nam probos veritatem insegui, populares famam; quibus sententiis consentanea sunt eius monita ut commentarii, nuperrime mala disciplina pravati, tandem revocentur ad vera: eam enim honestam narrationem quam Graeco nomine dicimus historiam, testem esse temporum, lucem veritatis, vitam memoriae, magistram vitae, cuius scriptores decet nuntios veri esse, non ficti pravique tenaces. Quousque tandem patiemur voculas quaslibet iactas per aerem vel muris clanculum conscribillatas pro fide auctoris haberi? Quis custodiet ipsos custodes, si a vero diligenter comprobato ad turbam opinionum defecerint? Qui denique res publica servabitur a mendacissima quaque prava dominatione? Candidatae nostrae tanta iuste roganti iusta responsa dare iuvat sonorissime gratulantes.

DOCTOR IN LAWS Olivia O'Leary

Of good writing the source and fount is wisdom. (Horace, *The Art of Poetry*, 309)

Journalism, like poetry, 'should be in search of the truth, and it needs to be very honest: you can almost always tell when it's not.' With this recent statement our last candidate, with characteristic incisiveness, sums up the formidable power of words, and the immense responsibility of her 'trade', which requires an unfailing commitment to good and truthful journalism. We are honoured to welcome OLIVIA O'LEARY, exceptional political journalist, broadcaster and commentator of current affairs in our times. Her fortyyear career as one of the foremost women journalists in the history of these islands attests to the profound integrity of her mind and her heart, of her pen and her voice. In our collective imagination, she simply is the voice of the uncompromising quest for the truth, whether addressing us from RTÉ on *Today Tonight* and *Prime Time* or the BBC on Newsnight, whether bringing news from Dáil Éireann or interviewing Prime Ministers, fearlessly reporting from the Troubles in the 1970s or from the Falklands conflict in the 1980s, valiantly talking through the flames rising from Chernobyl or memorably addressing Queen Elizabeth II in her historic visit to Dublin. Of all the media which she has mastered so brilliantly as to deserve international recognitions, radio is her favourite, because, she says, 'it is powerful and fast, intimate and deeply human; it is not a performance'. Anyone who has heard her on BBC Radio 4's Between Ourselves, or RTÉ Radio 1 Drivetime and The Poetry Programme, knows exactly what she means. She always knows what the nation needs; which is not necessarily, she reminds us, what the nation wants. In recent times, her awareness of the changes in news communication has seen her engaged in a vocal campaign for quality journalism. A reporter writes history as it unfolds, and must possess qualities commensurate to the task of 'bearing witness to the passing of the ages, of shedding light upon reality, of giving life to recollection and guidance to human existence' (Cicero, On the Ideal Orator 2.36). The journalist must be a herald of truth, and have no part in wicked rumour 'clinging to the false and wrong' (Virgil, Aeneid 4.188). Of the spreading confidence in instant online news, she says that 'it is like walking around the city and getting your information from every bit of graffiti that's written on every wall and every overhead bridge'. Anonymous posts are irresponsible; unchecked news is dubious; false news is demagogic, not democratic. Reliable news, deep investigative work, analysis based on fact and set in context: this is the kind of news that serves true democracy. What are the consequences for society and democracy, if no opportunity is afforded to counteract lies? What future lies ahead for those who respect the truth? This woman is as ever formidable in asking *Questions*. In this temple of true knowledge, let us leave her in no doubt as to our reliable Answers.