Editorial
Male reproductive health and infertility

pISSN: 2287-4208 / eISSN: 2287-4690
World J Mens Health Published online May 12, 2025
https://doi.org/10.5534/wjmh.250038

The World Journal of MEN's HEALTH

Merit-based Academic Certification in Andrology: A Groundbreaking Initiative by the Global Andrology Forum

Giovanni Colpi[1,2], Germar-Michael Pinggera[2,3], Aldo Calogero[2,4], Eric Chung[2,5,6], Rossella Cannarella[2,4,7], Taymour Mostafa[2,8], Ramadan Saleh[2,9,10], Ryan Smith[2,11], Ahmed El-Sakka[2,12], Selahittin Çayan[2,13], Omer Raheem[2,14], Haocheng Lin[2,15,16], Rajender Singh[2,17,18], Ates Kadioglu[2,19], Rupin Shah[2,20,21], Ashok Agarwal[2,22]

[1]Andrology and IVF Center, Next Fertiity Procrea, Lugano, Switzerland, [2]Global Andrology Forum, Global Andrology Foundation, Moreland Hills, OH, USA, [3]Department of Urology, Medical University Innsbruck, Innsbruck, Austria, [4]Department of Clinical and Experimental Medicine, University of Catania, Catania, Italy, [5]Department of Urology, University of Queensland/Princess Alexandra Hospital, Brisbane, Australia, [6]AndroUrology Centre, Brisbane, Australia, [7]Glickman Urological & Kidney Institute, Cleveland Clinic, Cleveland, OH, USA, [8]Department of Andrology, Sexology & STIs, Faculty of Medicine, Cairo University, Cairo, Egypt, [9]Department of Dermatology, Venereology and Andrology, Faculty of Medicine, Sohag University, Sohag, Egypt, [10]Ajyal IVF Center, Ajyal Hospital, Sohag, Egypt, [11]Department of Urology, University of Virginia, Charlottesville, VA, USA, [12]Department of Urology, Suez Canal University, Ismailia, Egypt, [13]Department of Urology, Andrology Section, University of Mersin School of Medicine, Mersin, Türkiye, [14]Department of Urology, Cleveland Clinic, Abu Dhabi, UAE, [15]Department of Urology, Peking University Third Hospital, Peking University, Beijing, China, [16]Department of Obstetrics and Gynecology, Center for Reproductive Medicine, Peking University Third Hospital, Peking University, Beijing, China, [17]Central Drug Research Institute, Council of Scientific and Industrial Research, Lucknow, India, [18]Reproductive Biology, Academy of Scientific and Innovative Research, Ghaziabad, India, [19]Department of Urology, Istanbul University, Istanbul, Türkiye, [20]Department of Urology, Lilavati Hospital & Research Centre, Mumbai, India, [21]Well Women's Clinic, Sir H N Reliance Hospital, Mumbai, India, [22]Cleveland Clinic, Cleveland, OH, USA

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/4.0) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

The concept of "merit," inherently tied to the idea of "good," has been a cornerstone of human intellect and society throughout history. Since the earliest days of humanity, merit has been central to evaluating individual contributions, with many religions emphasizing assessing a person's life based on their merits. Those who have made significant contributions—whether for good or ill—are etched into the annals of history. However, history itself is a vast mosaic, with each piece representing the collective contributions of countless individuals.

The same holds true for the history of science, which is built upon both major breakthroughs and smaller yet essential contributions. In medicine and biology, iconic figures have made transformative advancements immortalized in the metaphorical "Golden Book" of

Received: Jan 30, 2025 **Revised:** Feb 3, 2025 **Accepted:** Feb 18, 2025 **Published online** May 12, 2025
Correspondence to: Ashok Agarwal https://orcid.org/0000-0003-0585-1026
Global Andrology Forum, Global Andrology Foundation, 130 West Juniper Lane, Moreland Hills, OH 44022, USA.
Tel: +1-216-312-5829, **E-mail:** agarwaa32099@outlook.com, **Website:** https://www.globalandrologyforum.com
The researchers contributing to this publication are members of the Global Andrology Forum (GAF), based in Moreland Hills, OH, USA. GAF operates under the Global Andrology Foundation, a non-profit organization registered in Innsbruck, Austria.

Copyright © 2025 Korean Society for Sexual Medicine and Andrology

The World Journal of MEN's HEALTH

scientific progress. Yet, as with a masterpiece painting, where the focal subject captures the viewer's attention, every individual brushstroke—no matter how subtle or tucked away—is indispensable in completing the whole.

In Andrology, as in other scientific disciplines, contributors have been shaped by a combination of their abilities and the circumstances that influence their lives. While some have received widespread recognition, standing out like poppies in a wheat field, others have quietly pursued commendable work without much public acknowledgment. Nevertheless, all contributors who have made meaningful advancements share a common desire for their efforts to be recognized—ideally during their lifetimes.

The Global Andrology Forum (GAF) merit certification arises from this innate desire for fairness and justice, shared by all intellectually honest individuals. It seeks to acknowledge and celebrate contributions to the field of Andrology, ensuring that no effort goes unnoticed in the collective progress of science.

The GAF has introduced a merit-based certification process to address persistent challenges in academic recognition. This innovative system is grounded in objective criteria, including academic achievements, research contributions, and professional engagement, ensuring that recognition is awarded based on measurable accomplishments. By eliminating the influence of subjective biases, this approach ensures that deserving individuals are acknowledged and fosters diversity and inclusiveness within the academic community [1-3].

The need for such a reform is clear. It establishes a more equitable framework where recognition is firmly rooted in tangible achievements rather than external factors. Adopting this merit-based system could serve as a model for other disciplines, setting a precedent for fairness and equity across the broader academic landscape.

In response to the challenges posed by biases in traditional academic recognition, the GAF has introduced an innovative merit-based certification system to promote fairness and transparency within the field of andrology. This initiative is founded on the principle that professional recognition should be determined by an individual's dedication, expertise, and contributions rather than personal affiliations or subjective factors. Open to both clinicians and researchers, the GAF certification process encompasses a wide range of achievements, including academic performance, groundbreaking research, and active engagement within the andrology community [3].

This system is designed to assess individuals based on objective, measurable criteria, effectively eliminating the influence of biases related to race, gender, or institutional affiliation. Research has shown that transparent, criteria-based recognition systems foster equity and stimulate innovation by rewarding true merit [4]. By implementing a process that emphasizes accomplishments without the interference of external factors, GAF merit-based certification has the potential to redefine standards for professional recognition in academia.

The initiative seeks to honor those who demonstrate excellence in the field and inspire similar reforms across other disciplines, promoting a more inclusive and meritocratic academic environment. By adopting this forward-thinking approach, GAF aspires to create a landscape where clinicians and researchers are celebrated solely for their meaningful contributions to medicine and science, irrespective of extrinsic influences.

WHY IS MERIT-BASED CERTIFICATION ESSENTIAL IN ANDROLOGY?

1. Eliminating discrimination and bias

One of the most subtle yet significant threats to merit-based certification is the presence of unconscious biases, deeply rooted in human nature and shaped by past experiences, scientific interactions, and societal norms. These biases create challenges that professionals often face, which can be broadly classified into three categories: researchers, facilitators, and organizational barriers [5,6].

A key obstacle among researchers is the "lack of correct understanding of team science research." Challenges such as unequal expertise, varying personalities, misaligned assumptions about skills, differing ideas of responsibilities, and limited flexibility in collaborating with multiple researchers often hinder effective teamwork. Facilitators play a crucial role in overcoming these barriers by exhibiting motivation, strong communication skills, and the ability to inspire interest while clearly articulating research objectives. Facilitators must also be forward-thinking when handling executive tasks. In the context of team science, strategies

around member selection, team composition, and team building are equally essential. This includes balancing "academic degree" requirements with "professional discipline-based differences" to create diverse and effective teams [6,7].

From its inception, the GAF has adopted a forward-thinking approach to address these professional barriers. With a robust and diverse membership and an impressive record of scientific contributions, GAF proactively fosters equity, diversity, and inclusion among its members, regardless of profession, gender, race, or country. The GAF leadership team prioritizes raising awareness and breaking down these barriers through regular seminars, workshops, and lecture series, both online and in person. These initiatives promote collaboration across the GAF membership and the broader scientific community [1].

GAF equips its members with the knowledge, skills, and opportunities to undertake high-level scientific research. Training sessions on topics such as systematic literature reviews, surveys, and consensus statements ensure that members are empowered to contribute to their fullest potential. Constant feedback and sharing experiences enhance members' understanding of scientific projects and their ability to collaborate effectively [1].

The dedication and proactive approach of the GAF management and leadership teams create an environment where members feel encouraged to contribute to scientific endeavors. GAF drives its members toward more extraordinary scientific achievements by fostering a shared sense of responsibility. Highlights from meetings, workshops, articles, and personal accomplishments are regularly shared within the GAF community, stimulating interest and demonstrating the tangible benefits of membership. These efforts break down resistance, address common barriers, and reinforce the merit-driven inclusiveness and diversity that GAF champions [1].

The GAF management team actively listens to concerns, provides support, and ensures that its commitments to equity and inclusion go beyond rhetoric and are translated into meaningful actions. Through these concerted efforts, GAF exemplifies how an inclusive and merit-driven organization can overcome biases and foster collaborative success.

2. Recognizing excellence in a global community

Merit-based certification symbolizes distinction, driving career advancement and inspiring excellence across disciplines. This approach is essential for fostering growth and innovation in emerging scientific fields like andrology.

This system promotes inclusivity and equal opportunity in a discipline that addresses universal reproductive health challenges, motivating practitioners from all regions to pursue academic and professional excellence. Prioritizing merit over external factors fosters international collaboration and innovation, advancing evidence-based practices that benefit patients worldwide. Moreover, this certification underscores the value of diversity and equality in shaping the field. Recognizing contributions from around the world ensures that outstanding work is acknowledged and celebrated, reinforcing the scientific community's collective progress [5].

Finally, merit-based certification highlights exemplary achievements across borders, enhancing trust in the expertise of certified professionals and strengthening the global impact of the andrology (sub)specialty. Through this process, the field moves toward a more equitable, innovative, and patient-centered future.

HOW DOES THE MERIT-BASED CERTIFICATION WORK?

1. Categories and eligibility criteria

The GAF merit calculator is an Excel-based tool used to assess applicants' qualifications across several certification categories. It provides a merit-based evaluation that considers academic career trajectories and practical qualifications in andrology, ensuring a comprehensive and inclusive approach to professional accreditation. The following classification categories were used (Supplement Fig. 1):

1. Distinguished GAF Academician
2. Senior GAF Academician
3. Young GAF Academician
4. GAF Eminent Clinician
5. Distinguished GAF Scientist
6. GAF Scientist Senior
7. GAF Scientist Young

The primary starting sheet is intended to collect essential personal data from the applicant, including

their full name, academic degree, email address, ORCID ID number, date of GAF membership, and birthdate. These inputs are validated through data consistency checks to ensure accuracy before guiding the applicant to the most appropriate certification category. Each certification-specific sheet incorporates a detailed evaluation framework. The criteria include but are not limited to:

h-index, editorial roles, peer reviewer contributions, leadership positions with professional contributions, clinical experience (where applicable), and scores for participation and engagement in the GAF-organized educational activities.

The calculator assigns scores to these parameters, represented visually through graphical bar charts and as a percentage of the maximum attainable score. The total points across all categories are compared against predefined minimum thresholds specific to each certification category (*e.g.,* 10, 12, 15, or 16). Applicants surpassing these thresholds qualify for the respective certifications.

The final outputs are displayed in a user-friendly format with color-coded indicators to denote whether the applicant has met or failed the certification requirements for a specific reason.

2. The merit calculator

The GAF merit calculator offers a structured and objective system for evaluating academic and professional contributions. It assigns weighted scores based on predefined metrics:

1. Research impact: h-index data from Scopus reflects research productivity and influence.
2. Editorial and reviewer roles: Points are awarded for editorial positions and/or peer-review contributions to reputable journals.
3. Leadership roles: Recognition is given for leadership in scientific organizations, emphasizing contributions to the broader academic community.
4. Clinical or research experience: Points are assigned based on years of experience and the complexity of procedures performed, particularly in clinical certifications.
5. Educational contributions: Exclusively for GAF-related activities such as mentorship and workshops, highlighting contributions to academic growth and knowledge dissemination.

The calculator automatically computes merit scores using these metrics and displays the results alongside the certification-specific threshold. If the score does not meet the threshold, the calculator suggests alternative categories better aligned with the applicant's profile. The calculator provides a user-friendly interface with clear instructions and explanations for each metric, thus ensuring transparency in the scoring process (Supplement Fig. 1).

3. Application process

The application process for GAF Merit Certification follows a structured six-step approach (summarized in Table 1) to ensure clarity and efficiency:

1. Data entry: Applicants input personal and professional information, bearing full responsibility for its accuracy.
2. Self-certification: Applicants validate their data using dropdown menus, confirming compliance with the program's standards.
3. Supporting documentation: An up-to-date curriculum vitae is required to substantiate claims.
4. Score evaluation: The GAF merit calculator generates a score compared against the required threshold for the chosen category.
5. Verification: Members of the GAF CORE Team (the CORE team is a group of senior advisers) are responsible for thoroughly reviewing proofs of credentials. They contact applicants for additional documentation to make their determination. Some applicants are rejected at this stage.
6. Certification issuance: Approved applicants receive a PDF diploma with a unique sequential number. Certifications are valid for three years and may require renewal or re-evaluation (Supplement Fig. 2). Since its launch on May 8, 2023, GAF has issued seventeen merit certificates (URL: https://www.globalandrologyforum.com/merit-based-certificate-recipients, Supplement Fig. 2).

Applicants falling short of the threshold receive guidance on alternative categories or ways to improve their eligibility. The GAF CORE Management Team reserves the right to revoke certifications if fraudulent information is discovered at any stage.

IMPLICATIONS FOR RECIPIENTS

1. Professional growth and recognition

Achieving merit-based certification from GAF offers

Table 1. Workflow summary of the Global Andrology Forum (GAF) certification application

Step	Key action	Reason
Step 1: Gather required information	Before starting the application process, GAF members must ensure they have the necessary information prepared.	This step prevents interruptions during the application process by ensuring all required data is readily available.
Step 2: Complete the "Personal Info" section	Complete all required fields in the "Personal Info" section of the application. Required fields are highlighted in green.	The system automatically flags any missing or incomplete information.
Step 3: Agree to the terms	Carefully read and confirm the terms and conditions outlined in the application form. This includes: · Acknowledging the accuracy of the provided data. · Understanding that GAF Management may request proof of qualifications. · Acceptance that GAF certification is not a legal entitlement and can be revoked by GAF management.	Confirm agreement with the terms before moving forward.
Step 4: Choose the relevant certification calculator	Based on your profile (*e.g.,* Distinguished, Senior, Young, Clinician, Scientist), select the appropriate certification calculator from the available categories and navigate to the corresponding sheet in the Excel file.	Permit a user-friendly interference by automatically importing the inputs from the primary sheet.
Step 5: Fill in academic metrics	Enter all requested data into the green cells in the calculator.	The calculator automatically generates a merit score and indicates whether the threshold for the selected category has been met.
Step 6: Save and send the application	Save the completed Excel file with all required fields and mail it to the provided designated recipient address.	This will start the verification process by the GAF CORE team.

significant benefits and several advantages for the designated recipients, including enhancing their professional status and paving new avenues for growth and opportunities. International recognition is one of the most profound advantages, as this certification not only proves an individual's dedication to andrology but also serves as a mark of authenticated excellence visible across global platforms. As professionals recognized for their expertise, certified individuals gain credibility within their institutions and beyond. This enhanced recognition and increased prominence can lead to increased collaborative opportunities on research projects, serving as guest lecturers, or participating in international conferences. The merit-based certification also offers enhanced career opportunities by positioning recipients as leaders in their fields, making them more attractive candidates for leadership roles, research grants, and prestigious academic positions.

Furthermore, the certification reinforces an individual's reputation as a trusted and reliable expert in this specialty, creating new possibilities for partnerships with other professionals and institutions. For those involved in clinical practice, the certification can serve as a potent tool for increasing patient trust, as it validates the practitioner's commitment to maintaining high standards of care. Additionally, being recognized by a reputable organization such as GAF may lead to opportunities to contribute to policy development or the creation of clinical guidelines, thus shaping the future of andrology practice internationally.

2. Role of GAF in shaping global andrology

Recipients of the GAF merit-based certification play a pivotal role in shaping the future of global andrology by acting as role models for their peers and emerging professionals in the field. By demonstrating excellence in clinical practice, research, education, and innovation, they set benchmarks for what can be achieved, inspiring their peers and the next generation of professionals.

Certified individuals exemplify values such as dedication, diligence, and integrity. As leaders in their field, they motivate emerging andrologists to pursue excellence by setting high standards through their achievements. Recognized professionals often serve as mentors, sharing their expertise with younger colleagues to ensure the continued development of skilled and knowledgeable andrologists. This mentorship helps sustain the momentum of progress in the field.

The presence of these leaders in various international settings, from academic institutions to healthcare facilities and research labs, creates a ripple and cascad-

ing effect that raises the profile of andrology globally. Their commitment to advancing andrology serves as a blueprint for how professionals can contribute meaningfully to improving patient care, research methodologies, and public awareness of andrology practice.

By recognizing and empowering professionals, GAF's merit-based certification program ensures that the field of andrology continues to thrive globally. These certified individuals enhance their careers and contribute significantly to the betterment of andrology as a whole.

BROADER IMPACT ON THE SCIENTIFIC COMMUNITY

1. Setting new standards for recognition

The foundation of merit lies in recognizing the value, excellence, or superior quality of an individual's work, as determined by a structured process that benchmarks performance against clearly defined standards and, where applicable, the achievements of peers within similar roles.

The creation of merit-based certification naturally promotes scientific rigor, quality, and academic integrity. In a broader sense, recognition of excellence in research permits more significant opportunities for research funding and fosters access to global research networks for collaboration. Recognition also encourages an investigator to pursue and produce impactful research instead of more limited investigations. Additionally, merit-based certification removes barriers to collaborative research by encouraging interdisciplinary interactions, thereby expanding investigators' expertise beyond siloed domains.

2. Fostering a culture of excellence and integrity

The rigorous evaluation process inherent in merit-based certification also motivates researchers to improve their research methodology and study design and lends itself to overall quality improvement. Providing awards for outstanding achievement is one of the best ways to encourage loyalty and innovation within the scientific community. By basing recognition on measurable performance rather than non-merit factors, merit-based systems establish fairness and transparency in rewarding excellence. In the field of andrology, this system supports impactful research and the dissemination of expert knowledge. This iterative process is expected to enhance adherence to research and clinical guidelines, promoting a consistent and high-quality approach to care.

Moreover, merit-based certification nurtures a global collaborative scientific community by incentivizing professionals to uphold the highest standards of integrity and excellence. This system inspires a culture of innovation and dedication, advancing both individual careers and the entire field of andrology.

CALL TO ACTION: A FUTURE BASED ON MERIT

The GAF invites all its members to actively apply for merit-based certification. This certification stands as a prestigious recognition of professional expertise and a testament to an individual's dedication and achievements in the field of andrology. Participating in this program encourages members to strive for continuous improvement and push the boundaries of professional excellence.

GAF envisions its members joining forces to redefine the standards of success in andrology, making merit the sole benchmark for evaluating professional achievements. Through their participation, members will contribute to establishing a culture of excellence and innovation, inspiring the global andrology community.

Looking ahead, GAF is dedicated to fostering an equitable, fair, and transparent professional ecosystem. In this environment, merit will ultimately measure an individual's value and career accomplishments. GAF envisions a future where every professional in the field of andrology can shine and receive recognition for their unique contributions and expertise. Regardless of origin, gender, or background, this system celebrates talent, dedication, and authentic learning. GAF is committed to creating a landscape where exceptional efforts are transformed into career-defining achievements, allowing each individual's contributions to guide advancing andrology.

CONCLUSIONS

The GAF merit-based certification represents a transformative step forward in recognizing and fostering excellence within the field of andrology. Establish-

ing a rigorous, transparent, and objective framework for evaluation sets a new standard for professional recognition based solely on measurable achievements. This initiative eliminates barriers imposed by biases and nurtures a global culture of equity, inclusivity, and scientific integrity.

The certification serves as a sign of distinction, inspiring professionals to strive for higher standards in clinical practice, research, and education, thus implementing the motto that should be innate in the mind of any academician or clinician or researcher of proven excellence: "Towards greater things, always." It encourages collaboration, innovation, and the dissemination of expert knowledge across international borders, fostering a unified vision for advancing andrology. Looking ahead, the GAF certification is poised to redefine the benchmarks of success, paving the way for a more equitable and impactful academic and professional environment. It underscores the value of recognizing contributions from all corners of the globe, ensuring that talent, dedication, and expertise remain the cornerstones of progress in this critical field. Through this initiative, GAF reinforces its commitment to shaping the future of andrology, offering a legacy of excellence for generations to come.

Conflict of Interest

The authors have nothing to disclose.

Funding

None.

Acknowledgements

Authors are thankful to Daniela Delgadillo, BS for her help with the manuscript submission.

Author Contribution

Conceptualization: AA. Methodology: AA, GMP. Writing – original draft: All authors. Supervision: AA. Validation: All authors. Writing – review & editing: All authors.

Supplementary Materials

Supplementary materials can be found via https://doi.org/10.5534/wjmh.250038.

REFERENCES

1. Agarwal A, Saleh R, Boitrelle F, Cannarella R, Hamoda TAA, Durairajanayagam D, et al. The Global Andrology Forum (GAF): a world-wide, innovative, online initiative to bridge the gaps in research and clinical practice of male infertility and sexual health. World J Mens Health 2022;40:537-42.
2. El Ansari W, Savira M, Atmoko W, Shah R, Boitrelle F, Agarwal A; Global Andrology Forum. The Global Andrology Forum (GAF): structure, roles, functioning and outcomes: an online model for collaborative research. World J Mens Health 2024;42:415-28.
3. Pinggera GM, Ramsay J, Zini A, Atmoko W, Colpi GM. Revolutionizing andrology: the advent of the Global Andrology Forum, a groundbreaking initiative. World J Mens Health 2025;43:1-7.
4. Llorens A, Tzovara A, Bellier L, Bhaya-Grossman I, Bidet-Caulet A, Chang WK, et al. Gender bias in academia: a lifetime problem that needs solutions. Neuron 2021;109:2047-74.
5. Desveaux L, Mitchell JI, Shaw J, Ivers NM. Understanding the impact of accreditation on quality in healthcare: a grounded theory approach. Int J Qual Health Care 2017;29:941-7.
6. Frank JR, Taber S, van Zanten M, Scheele F, Blouin D; International Health Professions Accreditation Outcomes Consortium. The role of accreditation in 21st century health professions education: report of an International Consensus Group. BMC Med Educ 2020;20(Suppl 1):305.
7. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Global Health; Global Forum on Innovation in Health Professional Education. Exploring the role of accreditation in enhancing quality and innovation in health professions education: proceedings of a workshop [Internet]. c2016 [cited 2019 Nov 18]. Available from: https://www.nap.edu/download/23636