



Involvement in National Gastroenterological Societies for Professional Development and Career Advancement: Tips for Trainees

Alana Persaud¹ · Mohammad Bilal²

Received: 21 August 2023 / Accepted: 28 August 2023 / Published online: 15 September 2023
© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2023

Abstract

Engaging with national gastroenterological (GI) societies offers a plethora of pathways for professional development at every career stage. While each society has a mission with distinct aims, which provides a different spectrum of opportunities, almost all societies share several common goals. Involvement in national GI organizations can not only help in professional advancement but can be a rewarding and meaningful way to contribute to our field. There are several benefits of engagement with national GI organizations and trainees should see what aligns with their goals to make the best of the opportunities offered by these organizations. These include education, scholarship, and research opportunities, establishing mentorship, developing leadership skills, and involvement in advocacy among many others. In this article, we aim to provide a trainee and early career gastroenterologist's perspective of various benefits of involvement in national GI societies and how it can help in professional development and career advancement.

Education

Education is a critical mission of all GI organizations. While fellowship is a continuous source of continued medical education (CME), the national GI organizations are dedicated to providing education to Gastroenterologists at all career stages. The American College of Gastroenterology (ACG) offers weekly virtual Grand Rounds with expert commentary, while the American Society for Gastrointestinal Endoscopy (ASGE) has an app based platform in "GI Leap" that provides excellent resources for endoscopy education. The American Gastroenterological Association (AGA) Universe is the access point for Digestive Diseases Self-Education Program (DDSEP), among the most widely used board review resources (Table 1). All societies have their practice guidelines readily available on their websites as well as abundant opportunities to obtain CME credit. This offers an invaluable resource especially if a fellowship program doesn't have faculty experts in a particular area (e.g., some

programs might not have a liver transplant program or an anorectal manometry program).

Leadership

Leadership roles are important for professional growth, both for trainees and early career professionals. All societies offer a variety of committee positions, allowing engagement in each aspect of the organization. Greater contribution in this capacity can lead to roles of greater responsibility and eventual prominence within the ranks of an organization. Committees are ideal to develop leadership skills, partake in networking opportunities, and make a meaningful impact on the organization's mission [1]. Formal leadership programs offer opportunities for refinement of professional skills and development of strategies for career advancement. The ACG Institute created a structured leadership program designed for early career faculty as part of the Early Career Leadership Program. With its success, a similar program for experienced and tenured track clinicians was devised for mid-career faculty, known as the Advanced Clinical Leadership Program. Similarly, the American Association for the Study of Liver Diseases (AASLD) championed the "Emerging Liver Scholars program," which is geared toward professional development for residents with a passion for Hepatology (Table 2).

✉ Alana Persaud
alanabpersaud@gmail.com

¹ Department of Gastroenterology and Hepatology, Geisinger Medical Center, Danville, PA, USA

² Division of Gastroenterology & Hepatology, Minneapolis VA Medical Center, University of Minnesota, Minneapolis, USA

Table 1 Educational resources

ACG	
Virtual Grand Rounds	Virtual lectures broadcasted weekly from renowned GI experts
Education Universe	Online platform of review questions and lectures
Board Prep and Self-Assessment Tests	ACG question bank of board review questions
ACG Podcasts	Variety of podcasts from AJG, ACG Practice Management Toolbox, ACG Case Reports Journal, among others
AGA	
Digestive Diseases Self- Assessment ProgramDDSEP	AGA's premier board review resource
AGA Universe	Online platform of training modules, MOC activities, and lectures
ASGE	
GI LEAP	Online platform containing prior webinars, podcasts, post-graduate course materials, and other educational content
Endo Hangout	Lectures outlining best endoscopic tips and techniques, especially for fellows
GESAP X	Self-assessment program designed to increase your knowledge and decision-making skills in 10 specific areas of diagnostic and therapeutic gastroenterology and endoscopy
Video Tips and Tech Talks	Expert guidance on common (and uncommon) endoscopic management
AASLD	
LiverLearning	Hepatology educational content for clinicians and other healthcare professionals, with opportunity to earn continuing education credit
Fundamentals of Liver Disease	Free course to learn about the basics of liver disease

Table 2 Leadership

ACG Institute	
Early Career Leadership Program	Leadership, mentorship, advocacy opportunities, and networking for early career GI; 1–5 years out of training
Advanced Leadership Development Program	Leadership, advocacy for mid-career professionals (10–20 years post fellowship)
Emerging Leaders Program	Leadership and job related activities for 3rd and 4th year fellows
ASGE	
LEAD Program	Offers Early Career GI the opportunity to enhance leadership and career development skills; at least 1 year after fellowship
Committees	leadership opportunity with several spots for trainees available, also expedited opportunity to become FASGE
AGA	
Future Leaders Program	Leadership program for minorities
FORWARD Program	NIH funded program for minority physician scientists
Young Delegates Program	opportunities for publications and clinical initiatives
Women's Leadership Development Conference	National leadership skills and emphasis on mentorship/sponsorship
Committees	leadership opportunity, with at least 1 spot for trainees on each committee

Scholarship

Scholarly activity comes in various shapes and forms. All GI societies are dedicated to advance the scholarship mission for gastroenterologists at levels of their career. Scholarly work is also an integral part of fellowship and academic job opportunities. A variety of research awards are made available from each national organization. The ACG Institute prides itself on scholarships for digestive

diseases, epidemiology, and diverse clinical research totaling nearly \$30 million since its 1994 inception. The ASGE funds basic, translational, and clinical work focused on gastrointestinal endoscopy, exemplified by the ASGE Innovation Award among many others. The AGA bestows over \$2 million in scholarships annually with a concentration on GI Malignancy, IBD, Eosinophilic Diseases as well as grants to DDW (Table 3). The AASLD has provided over \$57 million since 2000 for innovative hepatology research, including travel grants and clinical research. In

Table 3 Scholarship

ACG institute	
Clinical Research Leadership Program	Teaches skills related to successfully managing a research team from both financial and leadership standpoint
Junior Faculty Development Award	3 year award for faculty studying gastroenterology or hepatology, award totals \$450,000
Established Investigator Bridge Funding Award	2 year award for faculty studying digestive diseases, award totals \$300,000
ACG/ASGE Epidemiologic Research Award	1 or 2 year awards for fellows or faculty studying outcomes in gastrointestinal endoscopy, award totals \$50,000
Clinical Research Award	1 year award for patient-oriented research, award totals \$50,000
Clinical Research Pilot Project	For trainee and faculty for pilot projects
Resident Clinical Research Award	Residents studying patient-oriented clinical care, award totals \$10,000
Medical Student Research	6–10 week summer research experience for medical students, with funding up to \$5,000
Health Equity Research Award	2 year award for faculty studying healthcare disparities, award totals \$75,000
ASGE	
Research Award	2 year award for basic, translational, and clinical research related to gastrointestinal endoscopy, award totals \$75,000
ACG/ASGE Epidemiologic Research Award	1 or 2 year awards for fellows or faculty studying outcomes in gastrointestinal endoscopy, award totals \$50,000
Diversity and Inclusion Research Award	2 year award for gastroenterology research with a focus on minority health and healthcare disparities, award totals \$50,000
NYSGE Award for Collaborative Endoscopy Research in Honor of Florence Lefcourt	2 year award for Multi-Institutional Collaboration focused on GI Endoscopy, award totals \$100,000
Innovation Award	Supports invention of a novel concept prototype, award totals up to \$10,000
AASLD	
Abstract Travel Awards	
Advanced Practice Provider Award	Award totals \$1,000
Early Career Investigator Award	Students, APP, and MD/PhD equivalents with a focus on clinical, basic or healthcare disparity research, award totals \$1,000
Fellow Research Award	Award totals \$1,000
Liver Transplant and/or Hepatobiliary Surgery Fellow Award	Award totals \$1,000
Pediatric Research Award	Fellows or Junior Faculty affiliated with pediatrics, award totals \$1,000
Resident Research Award	Residents with an interest in Liver Disease, Award totals \$1,000
Student Research Award	Students are eligible, Award totals \$1,000
International Early Career Investigator Award presented in Honor of Professor CY Kim	Research from those residing in South Korea, Award totals \$1,500
Professor Margit Hamosh Travel Award	HCC research, Award totals \$2,500
Professor Mindie H. Nguyen Award for Outstanding Clinical Research by Early Career Investigators	Liver diseases research from investigators in Africa, Central/South America, Southeast Asia, and Western Pacific, award totals \$2,500
Northern Lights' Canadian Legacy Travel Award	For trainee or APP, Award totals \$2,500
The Rosalyn and Leo Fried Memorial Travel Award	For Middle Eastern Researchers, Award totals \$2,500
AASLD Foundation Fellow (DDW) Abstract Award	Award totals \$1,000
Emerging Liver Scholars	For medical residents, provides funding for The Liver Meeting, AASLD trainee membership, and journal subscription
Pinnacle Research Award in Liver Diseases	3 year award for Junior Faculty studying basic science research, award totals \$300,000
Clinical, Translational and Outcomes Research Award in Liver Diseases	2 year award for Junior Faculty studying clinical, translational, and outcomes research, award totals \$200,000
Afdhal/McHutchinson LIFER Award	2 year award for Postdoc or Research Fellow studying clinical, translational, and outcomes research, award totals \$100,000
Pilot Research Award in Liver Diseases	1 year award for Faculty studying basic, clinical, translational, and outcomes research, award totals \$50,000

Table 3 (continued)

Gupta Family Pilot Award in PSC Research	1 year award for Postdoc or Faculty studying basic, clinical, translational, and outcomes research, related to PSC, award totals \$50,000
Autoimmune Liver Diseases Exploratory Research Award	1 year award for Graduate students to Faculty studying basic, clinical, translational, and outcomes research, related to PSC, PBC, or AIH, award totals \$20,000
Advanced Transplant Hepatology Fellow Award	1 year award for GI Fellows for travel funds and career development award, totals \$4,000
Bridge Award	1 year award for Faculty studying basic, clinical, translational, and outcomes research, award totals \$100,000
Emerging Advanced Liver Advanced Practice AGA	For APP for travel/career development purposes
AGA Pilot Research Award	1 year award for research new directions in gastroenterology and hepatology, award totals \$30,000
AGA Caroline Craig Augustyn and Damiam Augustyn award in digestive cancer	1 year award for digestive cancer research, award totals \$40,000
AGA-Pfizer Pilot Research Award in IBD	1 year award for research new direction in treatment of IBD, award totals \$30,000
AGA-Pfizer Pilot Research Award in Steatohepatitis	1 year award for research new direction in treatment of NASH, award totals \$30,000
AGA-R. Robert & Sally Funderburg Research Award in Gastric CA	2 year award for novel approaches to gastric CA research, award totals \$100,000
AGA Ironwood Fellowship to- Faculty Transition Award	2 year award that allows for protected time for clinical and translational research, award totals \$130,000
AGA-Pfizer Fellowship-to-faculty Transition Award	2 year award that allows for protected time for clinical and translational research related to immunology, award totals \$130,000
AGA Research Scholar (RSA)	3 year award for early career faculty working toward an independent career in digestive diseases research, award totals \$300,000
AGA-Bristol Myers Squibb Rearch Scholar Award in IBD	3 year award for early career faculty working toward an independent research career in IBD research, award totals \$300,000
AGA-Dr Harvey Yound Education &Development Foundation's Young Gut Scholar Pgm	10 month award for undergraduate students from underrepresented minorities to perform research in digestive diseases, award totals \$7,575
AGA Abstract Award for Health Disparities Research	1 year award for graduate student though postdoctoral fellow level for presentation of health disparities research at DDW, award totals \$500
AGA Fellow Abstract Award	1 year travel award for MD, PhD, or equivalent presenting at DDW, award totals \$1,000
AGA Student Abstract Award	1 year travel award for graduate student through medical residents presenting at DDW, award totals \$1,000
AGA-APFED Abstract Award in Eosinophilic GI Diseases	1 year travel award for graduate student through clinical fellow presenting research in eosinophilic GI disease at DDW, award totals \$500
AGA-Moti L. Kamla Rustgi International Travel Awards	1 year travel award for early career physicians presenting at DDW from outside North America, award totals \$750
AGA-Aman Armaan Ahmed Family Summer Undergraduate Research Fellowship (SURF)	10 week research fellowship for underrepresented minorities in biomedical sciences to study under GI leaders, award totals \$5,400
AGA-Gastric Cancer Foundation Ben Feinstein Memorial Research Scholar Award in Gastric Cancer	3 year award for early career faculty working toward an independent career in gastric cancer research, award totals \$300,000
GI Clinical Trialists Bootcamp	10 week training program meant to connect clinical trials workforce with gastroenterology; travel grants available
Registry Participation	FMT national registry and Trans-Oral Endoscopic Suturing Application Registry

addition, there are dedicated research awards and grants that are granted to trainees, both residents and GI fellows.

The annual meetings of the GI organizations are also an excellent opportunity for trainees to present their research

and scholarly work, not only allowing them an excellent platform but also opportunities to interact with leaders in the field. For instance, the ACG has a special meeting dedicated to trainees “The North American Conference of

Gastroenterology Fellows (NACGF) where selected fellows present their research and get valuable feedback on research skills from renowned researchers in the field.

Mentorship

Effective mentorship can be key to a successful career. Studies have shown this increases career satisfaction, job promotion, and peer-reviewed publications [2]. Those receiving adequate mentoring are more confident in their capabilities and inclined to seek advanced pursuits [2]. Sponsorship can be even more beneficial, as active promotion leads to opportunities that may otherwise not be possible for mentees. Involvement in national organizations offers opportunities for finding mentors in both formal and informal capacity. The ASGE Mentorship platform is designed for fellows and early career Gastroenterologists to cultivate relationships over at least 2 years, focused on a key career goal. The AGA mentorship program, Connections Corner, is conveniently accessed through the AGA Career Compass, a portal for many career development applications (Table 4). AASLD's mentorship program, Mentor Connect, operates via Virtual Mentoring and offers both one-on-one mentoring and group mentoring sessions. The ACG mentoring program is available for both fellows as well as residents.

Apart from formal mentorship program, engagement in these organizations can be an excellent way to find mentorship. Committee service can allow for engaging with other colleagues and leaders across the country and can open door for mentoring relationships.

Training and Skill Advancement

Among the biggest advantages of national organizations is the ability to offer unique experiences which complement the skillset of GI clinicians both cerebrally and endoscopically. The ASGE First Year Fellows Course is an introduction to commonly used techniques in Gastroenterology, while ACG's 2nd year Fellows Course is a selective

program demonstrating more complex techniques and case centered discussion (Table 5). Furthermore, ASGE's Advanced Lesion Resection program and Therapeutic EUS for Advanced Endosonographers Event are courses designed specifically for Early and Mid-Career Gastroenterologists. Exchanging knowledge, whether nationally or internationally, provides insight into expert opinion and promotes a sense of collaboration among institutions. ACG's prestigious Edgar Achkar Visiting Professorship allows for accomplished Visiting Professors to discuss topics of their expertise at GI fellowship programs where those expertise are limited (Table 5). The AASLD Global Outreach Initiatives provides input to the Global Outreach Committee regarding collaborative efforts and Hepatology related needs throughout the world. Moreover, with the progression of technological innovation comes the power of novel prototypes to enhance endoscopic technique and improve patient care. The AGA Center for GI Innovation and Technology is a key resource for partnership between industry and physician innovators when developing new technologies in GI. It holds the AGA Tech Summit yearly and funds the AGA Innovation Fellows Program for trainees to learn about the latest GI innovations.

Advocacy

The national organizations have advocacy initiatives to work with the Congress for issues such as prior authorization and Medicare coverage. The ACG National Affairs Action Network works to address federal policy and patient advocacy, while ASGE Advocacy accomplishes similar goals with 'Take Action Initiatives.' AGA members can become a Congressional Advocate to learn about public policy through correspondences with Congress (Table 6). AGA Political Action Committee is the bipartisan political arm that helps with raising funds for political candidates whose interests align with AGA. Involvement in advocacy initiatives allows an excellent opportunity for trainees to know the important

Table 4 Mentoring

ACG	
ACG Mentoring Program	Tailored mentorship program with members only exclusive video series
ASGE	
ASGE Mentorship Program	2 year program designed for fellows as well as early career GI to cultivate relationships and explore to additional areas beyond their home institution
AGA	
AGA Career Compass	Connections Corner- mentorship program
AASLD	
Mentor Connect	New Virtual Mentoring platform allowing one-on-one mentoring as well as group mentoring sessions

Table 5 Training and skill advancement

ACG	
Edgar Achkar Visiting Professorships/Diversity Visiting Professorship	Since 2014, 91 visiting scholars with expertise speak at institutions with a specific area of need
2nd year Fellows Course	Advanced course for senior fellows offering hands on experience, interaction with experts, and case centered discussion
North American International GI Training Grant	GI Fellows/Physicians can receive clinical research training or education outside of North America
International GI Training Grant	Supports physicians outside of North America to receive clinical or research training in GI within the US
North American Conference for GI Fellows	Research conferences which includes lectures and coaching by distinguished faculty
ASGE	
First Year Fellows Course	Introductory courses and hands on training at the start of fellowship
Senior Fellows Program	For 2 nd and 3 rd year fellows to address a variety of non-clinical issues not always covered during fellowship training
Advanced Endoscopy Fellows Course	Includes video-editing skills as well as instruction on cutting edge endoscopic techniques
Endoscopic Training Award	Advanced Fellows or Junior Faculty are given the opportunity to train outside of their home country with a premier GI Endoscopist
ASGE Innovation Award	Supports invention concepts that could advance the practice of gastroenterology and patient care with a concept prototype
Early Career Practice Management Essentials Program	Teaches skills geared toward Advanced Fellows and Early Career Physicians
AGA	
Center for GI Innovation and Technology/AGA Tech Summit	Key resource for industry and physician innovators developing new technologies in GI; AGA Tech Summit
AGA Innovation Fellows Program	Provides an opportunity for GI fellows to learn about GI technologies at the AGA Tech Summit
AGA CORE (Clinical Observation and Research Education)	Allows for an international Gastroenterologist to complete a yearlong clinical observership in the US
AGA Academy of Educators	Strategies for maintaining excellence for clinician educators- theory and endoscopic skills
AGA Editorial Fellowship	Research mentorship by experts from leading GI journals
Young Guts Scholar Program	6 undergraduate students strengthen the pipeline of future leaders in GI research from diverse background
AASLD	
AASLD Global Outreach: Global Advisory and Regional Advisory Program/Hepatology Connect Programs	Provides input to the Committee regarding Collaborative efforts and needs in other parts of the world

Table 6 Advocacy

ACG	
National Affairs Action Network	Focus for change in federal policy and patient advocacy
ASGE	
Take Action Initiatives	Forum to petition for change via appeals/letters to Congress
AGA	
Congressional Advocate	Opportunity to engage and learn about public policy
Political Action Committee (PAC)	Bipartisan political arm that helps with raising funds for political candidates whose interests align with AGA

challenges out field is facing and can be rewarding to work on things that can make an impact for our patients and colleagues.

Diversity, Equity, and Inclusion

Studies have shown the inequity among men and women with regard to ranks of professorship [3] and survey

studies reveal that women are less likely than men to self-promote, although this is necessary for leadership positions [4]. The finding is also exhibited with URM, many of whom are less likely to progress to roles of importance in medical school [5]. Recent guidance outlines steps that when implemented at early educational stages, can incorporate diversity and inclusion activities into training [6]. Moreover, in works evaluating female-focused professional organizations, benefits included academic advancement, scholarly work, and peer support. [7].

The ACG developed the Health Equity Research Award for faculty studying healthcare disparities, while AASLD established an analogous award for fellows. Furthermore, the AGA designed the FORWARD Program for URM physician scientists, while the Future Leaders Program offers a leadership curriculum for URM (Table 7). The ASGE’s LEAD program provides structured mentoring and cultivation of professional skills for women in Gastroenterology. Lastly, AGA’s Women’s Leadership Development Conference supports a network of allyship throughout the country while fostering female empowerment (Table 7).

Building Your Tribe

In addition to the formal programs mentioned above, there are several organizations within GI that promote a sense of community and belonging within the GI society. Oftentimes they work closely with the larger GI societies and will frequently hold meetings during the national GI conferences.

Women in Endoscopy (WIE) and Scrubs N’ Heels are associations which are dedicated to empowering women in medicine and provide excellent opportunities for mentorship and developing leadership skills. The Association of Black Gastroenterologists and Hepatologists (ABGH) is an organization dedicated to provide opportunities and mentorship to other Black gastroenterologists and trainees and fosters the mission for diversity and equity in GI. Similarly, Rainbows in Gastro is a society that is committed to building a the Lesbian, Gay, Bisexual, Transgender (LGBTQ) friendly community and for advocacy for trainees, physicians, and patients who identify as LGBTQ+.

Patient Care

Our GI organizations have excellent resources for patient education. Topics range from colonoscopy education to IBD care in pregnancy and even the relation of COVID to Digestive Diseases. In addition, easy to read brochures are provided by ASGE while other informational videos are also produced by AGA, all to ensure that patients are given adequate resources to be informed about their health.

Networking

National meetings (DDW, ACG Annual Meeting, The Liver Meeting) are great ways to connect with mentors and colleagues, with the added benefit of social media gatherings.

Table 7 Diversity, equity, and inclusion

ACG	
Health Equity Research Award	Designed for faculty studying healthcare disparities
ASGE	
Diversity and Inclusion Research Award	Focus on minority health and healthcare disparities
ASGE Diversity Awards	Focus on research relevant to underrepresented populations (women, racial/ethnic minorities, LGBTQ, etc.)
LEAD Program	Program for female early career GI which offers the opportunity to enhance leadership and career development skills
AGA	
Women’s Leadership Development Conference	Promotes national leadership skills and emphasis on mentorship/sponsorship for women
AGA FORWARD Program	NIH funded program for minority physician scientists
AGA Future Leaders	Leadership program for minorities
AGA Equity Project	Multi-year commitment to achieve equity and eradicate disparities in digestive diseases
AGA Abstract Award for Health Disparities Research	Travel Award for Graduate Students, Medical Students, Residents, Clinical Fellows, or Post doctoral Fellows with presentation at DDW
AASLD	
AASLD Fellow Abstract Award	Healthcare Disparities Research
Women’s Initiatives Committee	A new 12-month mentorship program with goal of promoting leadership skills among women in hepatology

Organizations such as WIE and Black in Gastro typically hold receptions during these conferences as well. Moreover, Hands-on courses and regional meetings offer great prospects of interacting with well-known experts. However virtual webinars, Grand Rounds, and invited lectures are also ripe with opportunity to exchange ideas and connect with colleagues. Indeed, most activities which promote some form of interaction (whether in-person or virtual) provide networking opportunities from which all can benefit.

Have Fun

Lastly, involvement in GI organizations is a way to find our “work family.” Gastroenterology is a lively and dynamic specialty that offers a plethora of activities to fulfill any member’s needs. While these gatherings represent opportunities for discovery and growth, perhaps the most meaningful experiences are the relationships which are formed [8]. Through the numerous engagements offered by these societies, there is an opportunity to cultivate long-lasting connections and friendships. Involvement in GI organizations allows us a platform to connect with colleagues across the country and find peer-mentors, exchange ideas or even just vent.

References

1. Aby ES, Kriss M, Rubin DT, Pillai A. How to navigate national societal organizations for leadership development and academic promotion: a guide for trainees and young faculty. *Gastroenterology*. 2021;161:1361–1365.
2. Travis AC, Katz PO, Kane SV. Mentoring in gastroenterology. *Am J Gastroenterol*. 2010;105:970–972.
3. Jena AB, Khullar D, Ho O, Olenski AR, Blumenthal DM. Sex differences in academic rank in US Medical Schools in 2014. *JAMA* 2015;314:1149–1158.
4. Exley C, Kessler JB. The gender gap in self promotion. Working Paper 26435. National Bureau of Economic Research. Published 2019. www.nber.org/papers/w26345. Accessed 15 Feb 2021
5. Fang D, Moy E, Colburn L, Hurley J. Racial and ethnic disparities in faculty promotion in academic medicine. *JAMA* 2000;284:1085–1092.
6. Anyane-Yeboah A, Balzora S, Gray DM 2nd. Improving diversity and inclusion in GI. *Am J Gastroenterol* 2020;115:1147–1149.
7. Lin MP, Lall MD, Samuels-Kalow M, Das D, Linden JA, Perman S, Chang AM, Agrawal P. Impact of a women-focused professional organization on academic retention and advancement: perceptions from a qualitative study. *Acad Emerg Med*. 2019;26:303–316.
8. Gaidos JKJ, Hass DJ, Kane SV. How to strategically build your network for early career gastroenterologists. *Gastroenterology*. 2021;160:1461–1466.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.