

ADEPT Cases and Questions

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NOTE: ADEPT is designed to prepare promotion and tenure candidates and members of faculty evaluation committees. The website at <http://adept.gatech.edu> includes a bibliography of bias in faculty evaluation, links to Georgia Tech resources, and three online activities based on various fictional career accounts. The current document contains nine career accounts with accompanying questions for discussion about these fictional promotion/tenure cases.

Samia Mansour

[Issues: fluctuating productivity of a maturing scholar, ethnic/cultural differences]

Samia Mansour, who received her Ph.D. in Biochemistry from the Johns Hopkins University, was hired as an assistant professor by the Department of Physical Sciences at a prestigious research university. Mansour's research field has long been central to the university; she joined a number of colleagues who do similar and complementary work in the same field. Her start-up package was slightly better than average; she had four offers to consider at leading universities. Mansour was immediately asked to participate in a campus committee charged to study why so few women are employed in science during her first year. In her second and third years, she was invited to serve on two similar committees at the university level.

During her first three years at the university, Mansour produced an extraordinary number of publications in the top-ranked journals in her field, including one prize-winning paper. She wrote most of her papers with a small group of faculty and graduate students, but some represented collaborations with just one or two individuals, typically graduate students.

Mansour's funding level as an assistant professor was within the average range for her field and slightly higher than the departmental average. She was able to secure a lab budget based on a National Science Foundation (NSF) grant for new faculty in her area as well as some training grants for individual graduate students. She also partnered with colleagues in developing novel methods of drug delivery on a moderate grant from a pharmaceutical company.

In her third year, she won an NSF Faculty Early Career Development Award, largely for writing one paper that garnered much national attention for its novel approach to a particular problem. Near the beginning of her fourth year, she was notified by the NSF that she was selected as a recipient of the prestigious Presidential Early Career Award (PCASE).

Her undergraduate and graduate students generally awarded her good teaching scores. Evaluations for the intro-level undergraduate course earned some negative comments from a few students about her casual attire; as a result, Mansour upgraded her wardrobe and began to wear tailored clothing. She attracted excellent graduate students to her lab, encouraging some undergraduates to continue graduate study at the university and welcoming new graduate students. At the end of her third year, she was nominated for a college teaching award by the undergraduate coordinator with a recommendation from the graduate director who cited her "dedication" and "long hours of working in her lab along with graduate students."

In addition to her work on women's issues, Mansour was appointed to a number of unit and college committees concerning visiting speakers, honors, and searches. She became especially active in a professional society and in her college's network for junior faculty in sciences, for which she helped organize a session on grant-writing for new faculty. Issues concerning women in her unit, and to some extent in sciences more generally, fell on her shoulders, as manifested by numerous invitations by chairs and deans at her university to address student and alumni groups.

During her fourth year, Mansour consulted with her chair about coming up for an early decision on promotion and tenure. As she had established a body of work and a set of achievements comparable to or exceeding others in her field in her unit, she and her chair were confident of her chances to be promoted and receive tenure on this accelerated schedule. He had found her agreeable to serve in a broad range of roles at his request and considered this along with her PCASE as indicative of well-balanced roles and strong scholarly potential.

At the beginning of her fifth year, Mansour's case came up for review in her department. The letters of reference in her promotion and tenure dossier were generally good, except for one taking issue with her celebrated paper. The one negative review avoided addressing Mansour's entire scholarly output; instead, the reviewer took an extremely hostile approach to the argument of the celebrated paper. One member of the promotion and tenure committee noted that this review was so detailed that it could have been published as an oppositional argument in a journal along with Mansour's paper. This reviewer also commented negatively about Mansour's style of presenting papers at meetings of a professional society, raising some suspicions of a personal grudge. Another reviewer commented as much on the value of Mansour's service to the profession, especially for women in her field, as on the value of her scholarly research.

The unit promotion and tenure committee is split about whether to emphasize the negative review or the one privileging service and whether Mansour's case should be forwarded to the next level. One member expresses the view that her case should be eliminated from further consideration this year, ideally by having the chair of the department speak with Mansour about the negative review so the candidate can withdraw the dossier. This member suggests that next year the hostile reviewer and the one who supplied the review focusing on Mansour's service should not be invited to submit reviews and that her case would have a better chance of success if it comes up according to schedule rather than early.

Questions:

As a member of the unit-level promotion and tenure committee, what consideration would you give these reviews in evaluating Mansour's scholarship and career?

What would you suggest regarding whether Mansour's case ought to be considered early or whether it should be considered during the subsequent year?

Jamie Perez

[Issues: evaluation of collaborative research, equipment constraints, graduate students]

After receiving his Ph.D. in Materials Science and Engineering from the Massachusetts Institute of Technology, Jamie Perez joins a prestigious research university as a tenure-track assistant professor after completing post-docs at Berkeley and Northwestern. At the time of hiring, the search committee notes a one-year gap between post-docs, a time when Perez studied as a Fulbright Scholar at a European university. Support for his faculty slot is earmarked from the Dean's office for the first two years of the appointment by virtue of an underrepresented faculty hiring initiative.

Perez's start-up package was average for faculty in that unit, but there are some glitches in finding adequate lab space and equipment. While he had been verbally assured during his negotiations that he could share the lab of a senior professor, Perez is told upon arrival by the senior faculty member in his interest group that the senior faculty member's group has priority, and he has limited Perez and his students to two hours per week in that lab. The chair then sent an e-mail to Perez about a change of plans, suggesting that he share a lab with another entering assistant professor until the following year, when the senior colleague moved to a new building on campus. Although somewhat constraining to the research programs of both individuals, this logistical arrangement encouraged the two new colleagues to collaborate on a small research project with some industry funding while also continuing their individual research agendas. The chair recommended at the first annual review that Perez "pay greater attention to research funding in areas more closely linked to the unit's focus" and "try harder" to attract graduate students.

In year 2 Perez established a functioning independent lab, attracting a small number of graduate students, and published a paper in a journal about teaching undergraduates and one (with two collaborators) in a significant journal. The small amount of industry funding for collaborative research continued, and Perez was again counseled by his chair during the annual review to pursue more funding. In year 3 Perez coauthored papers in two important journals and worked as the sole materials science and engineering faculty member on a multidisciplinary project with four other faculty members from different engineering and science units. The collaborative, five-year project attracted \$5 million funding from the National Science Foundation and supported one post doc and three graduate students in Perez's lab. During this period Perez taught only relatively large undergraduate service classes, as senior professors in his interest group claimed the specialty and advanced courses in his area.

The third-year review of Perez's work resulted in a somewhat mixed evaluation. The school chair counseled Perez to "keep up the good work with teaching and service" but expressed his concern that Perez had not been able to secure more than a minimum amount of individual grants despite a very reasonable record of publication in top quality journals. The chair was also concerned that Perez had trouble retaining the more marginal graduate students assigned him (the more promising students were assigned to the most senior faculty in the same interest group). During his review meeting, Perez requested that his chair exercise leadership over the interest group so that he can teach graduate courses in his field and therefore attract more and better graduate students. The chair suggested that perhaps Perez "instead ought to consider devoting more time to individual research, especially in an area more closely

related” to the unit’s interests and strategic plans to supplement his collaborative work. The chair also expressed concern that Perez was not playing a leadership role in the interaction with other departments on the large NSF grant.

By the time of tenure review, it is clear that Perez did not emphasize pursuing any individual grant funding, as his chair suggested. Perez remained a popular teacher, according to evaluations of MSE majors, and a valued advisor as attested by some graduate students. He was somewhat more inclined than other faculty members in the unit to take on certain advising and other committee responsibilities. Although he attracted little individual funding, Perez was able to keep up a moderately active and fairly well funded research program in an area not well developed in the unit because of the multi-disciplinary collaboration.

Questions:

In the unit promotion and tenure committee, questions are raised regarding Perez’s future funding potential as an individual researcher, as a teacher of graduate students, and the value of his area of research for the unit.

As a member of the committee, how would you respond to these concerns and ensure that Perez receive a fair hearing?

Patty Shen

[Issues: fluctuating productivity, leave of absence in probationary period]

Patty Shen, who received a Ph.D. in Computational and Neural Systems from the California Institute of Technology, entered a prestigious research university as an assistant professor. She specialized in distributed computing and computation in neural and biological systems within the biomedical engineering group. Her start-up package was higher than average as her field was relatively new and required the purchase of some fairly expensive parallel computing and visualization equipment. Because Shen considered a competing offer, the department engaged in a bidding war to induce her to accept the appointment. Three other assistant professors in closely related areas were hired in the same year with packages not as generous as Shen's. At the end of Shen's first year, her chair complimented her on establishing "a good rapport" with her graduate students and for her success in publishing two papers based on her group's work, with two more in press.

Publishing additional papers in *Nature*, *Neuron*, *The Journal of Computational Biology*, *Current Biology*, and elsewhere, Shen continued her steady publication record through her next two years. She also took on responsibility for teaching one of the core courses for the undergraduate program and for introducing a key new graduate course in her area, earning above average and excellent evaluation scores from students. Exit interviews of seniors conducted by the chair indicated that all students appreciated Shen's thorough approach and that many, especially women, found her to be a valuable role model.

In her third year, Shen won an NSF Faculty Early Career Award. In addition, during her probationary period, Shen and two junior colleagues, along with two senior professors, developed a new center in bio-cognitive processing that was nurtured by the university before attracting a good deal of National Science Foundation funding.

Anticipating the birth of a child during the summer following her third academic year at the university, Shen requested during the prior spring two considerations: to receive an unpaid leave of absence during the subsequent fall term and to be released from teaching duties during the following spring under provisions of the university's Active Services Modified Duties Procedure. In lieu of teaching responsibilities in the spring, she proposed to design a new elective for upper-division students in her field and to continue working with the center that she helped develop. Her requests were granted, thereby stopping her tenure clock for one year.

During the year of her leave of absence and modified duties, Shen laid out plans for the new course and published two papers that had been in process. Unanticipated post-childbirth medical complications necessitated a long period of medical therapy, and she was unable to devote much time to her research during the time away from teaching as she was also coping with the demands of an infant. A private person, Shen did not share information about her medical condition with her colleagues, excepting her chair and dean whose confidence was requested because Shen needed them to support her need for a particular schedule and for a limited set of service responsibilities.

During the following year, Shen's official fourth year of service, she returned to teaching and earned speaking invitations at European and Asian seminars. It is in this year (the year after her child is born) that her publication record revealed a demonstrable gap: she had not submitted any publications and none were published in that year. Her own medical problems diminished her ability to mount focused technical efforts in the year following her leave.

By her official fifth year, Shen's medical problems abated, and she was able to accelerate her research productivity. In this year, she published and prepared more papers than any other professor in her unit and she received excellent evaluations from her undergraduate and graduate students, although she was able to contribute only minimal service efforts to her department given her family schedule. As her tenure clock was stopped for one year, Shen would have come up for tenure in her official fifth year. Because of the earlier gap in her publication, her chair advised her instead to wait until the following year (her official sixth) to come up for promotion and tenure evaluation. Somewhat reluctantly, Shen agreed.

By the time she came up for tenure (in her official sixth year and seven years after entering the university), her rate of publication dramatically increases, and her total record—in terms of the quantity and the quality of scholarly papers, her teaching evaluations and contributions, and her service--resembles those of the other assistant professors coming up for evaluation at the same time.

Letters from reviewers indicated that Shen has a strong scholarly reputation and that her work has key significance for her field. One reviewer mentioned Shen's medical difficulties following childbirth, an admission surprising the committee members who had not been previously informed. Some committee members had noted in earlier, initial committee discussions that Shen seemed to "appear and disappear" on the scene through the years, recalling lengthy periods in which she was not in attendance at faculty meetings and retreats. Her involvement in faculty committees was minimal as well. Her original cohort had already earned promotion and tenure, but Shen's stopping of the tenure clock for one year and her decision to wait until her second opportunity delayed her case another year.

Question:

As a member of her school promotion and tenure committee, how would you respond to these concerns raised by another member: that Shen has taken too much time to get to the same place as others under evaluation that year, that she may have accelerated her productivity over the past 12-14 months simply to be more competitive in the tenure process, and that she might not be able to sustain such productivity in the future?

Carl Anders

[Issues: disability, change of administration, teaching schedule]

Carl Anders, who received a Ph.D. in Computer Science from Indiana University, accepted an appointment as an assistant professor in the Department of Computer Science of a prestigious research university after a two-year post-doctoral appointment at the University of Illinois at Urbana-Champaign. Anders negotiated carefully with his new university regarding specific needs based on his disability, a cervical spinal cord injury limiting arm function. He used a power wheelchair for mobility and could not drive so he remained dependent on public transit by bus and privately arranged paratransit transportation. Anders had recurrent pressure ulcers that he managed by limiting his sitting time. Because he could not transfer independently, Anders avoided sitting more than 8 hours at a time. Because his bus commute was 45 minutes, he limited his on-campus time to 6 ½ hours per day. At home, he was able to work from his bed to which he could transfer by using a ceiling-mounted lift. This arrangement permitted him to work longer hours at home than he could work on campus.

The department chair hiring Anders assured him that the university's computer science department had great flexibility regarding course schedules and that the size of the faculty permitted the scheduler to meet individual needs regarding day/time of course meetings. Anders insisted on having a clause in his contract indicating the department would do all in its power to reasonably accommodate Anders' disability by scheduling courses within the period of 10 am-4 pm, preferably on a two-day schedule. This schedule assured Anders that he would be able to travel efficiently via public transportation and avoid a longer rush-hour commute that would take a physical toll on him.

During his first three years at the university, the department scheduled Anders for a graduate course and an undergraduate course, within his preferred time period and generally according to a two-day schedule, but sometimes with the graduate course scheduled for a third day. In this time, Anders published more than the average faculty member each year, eventually producing 35 papers, co-authoring a book with a colleague from another university, and organizing program committees for significant conferences. He also partnered with his collaborator on an industry grant to work on accessible computing interfaces for the legally blind. Anders' teaching evaluations were excellent; students reported that he frequently met with them on-campus on his teaching days, and encouraged them to use email, to phone, or to visit him at his home office by appointment on other days. He served in his second year on a departmental search committee and in his third year on the university's Presidential Commission for the Disabled.

Anders' work schedule did not cause any controversy during the period prior to his third-year review. He generally spent three days working on campus. His office and lab were made accessible for a power wheelchair and only minor computer equipment purchases were needed to permit Anders to use them effectively. The other two weekdays (plus weekends) he worked from his home office 10 miles from campus. On occasion (perhaps three or four times each term) he would come to special department, interest group, and committee meetings and other events outside of his normal schedule, scheduling paratransit at his own expense.

Anders' third-year critical review garnered him a very favorable evaluation from the departmental committee and praise from his outgoing chair. His colleagues remarked on the originality of his research, his dedication to his students, and his continuing, fruitful collaboration with his colleague, which was expected to lead to the creation of a university center on adaptive technologies for human-machine interfaces.

During Anders' fourth year at the university, the department welcomed a new chair, hired from outside the institution. Facing a period of budgetary problems dominated by the need to save money and use resources wisely, the new chair did not feel bound to honor any previous commitments made to individual faculty, and she pronounced a "clean slate" on policies and procedures. As a result, the department scheduler was instructed to make sure the classrooms were used efficiently and to treat the faculty the same. Under the new protocol, faculty would alternate two-day and three-day teaching schedules depending on the term. In addition, all faculty members were enjoined to work from their department offices except during periods of vacation or professional travel to better serve the mission of on-campus instruction and advisement. Anders immediately set an appointment to discuss his needs and request for reasonable accommodation with the new chair. He was assured by the chair that although she understood the difficulties of his situation and was supportive of his arrangement to work from home occasionally, "it would not be right" for the department to accommodate his needs to teach on specific days on a permanent basis and that he would need to make his requests each term. Anders consulted with the campus office on disability; the human resources representative accordingly spoke with Anders' chair to explain that the department ought to do all it could to accommodate Anders' need for a restricted schedule, even if it meant that other faculty (i.e., those without disabilities) might not have their scheduling preferences met. This negotiation improved Anders' schedule, but he noticed that his relationship with his chair became less cordial.

By the time of promotion and tenure, Anders' record looked more erratic than it had at the time of critical review. Letters of reference indicated that his publications, including his earlier papers, were highly regarded and even "inspirational" for others in his field. His overall publishing productivity was below average, as his productivity had diminished significantly in the last two years. The center (which he co-directed) garnered some funding from industry affiliates and alumni, but not extensive levels. His teaching scores had also dipped. In terms when he was on a three-day schedule with classes offered early in the morning or later at night, students reported that Anders was often late or had to leave early and appeared clipped and brusque, encouraging students to use email to correspond rather than to meet with him outside of class. Some members of the committee had heard Anders complain about the change of departmental leadership in terms of a breach of agreement, but consultation with the unit chair did not bear out any substance to this line of argument. She indicated that he received special considerations of schedule flexibility and office hours compared with other faculty.

At the promotion and tenure committee meeting, one member notes that some graduate students had complained about Anders' lack of accessibility. Others recall that the chair had commented on Anders not attending a number of departmental lunches and other events related to his areas of research and that he was not often in his office.

Questions:

As a member of the promotion and tenure committee evaluating Anders, how would you respond to the concern that his record demonstrates diminished productivity and that he was not a team player in the departmental efforts to achieve excellence?

What role does Anders' disability play in developing his past and future performance profile? What advantages or disadvantages related to his disability accrue during his career?

Discuss the impact of teaching schedule on careers of young faculty. Identify positive and negative aspects of teaching schedule (schedule, not load).

Discuss how a change of administrator can affect faculty development. Consider how the different principles articulated by each of Anders' chairs regarding teaching schedule and faculty accessibility could impact the individual and the department.

Consider the role of service to the university and to the profession in evaluating Anders' case. How much (and in what way) should his research and service on behalf of the disabled be counted?

What assumptions related to disability influenced your reading of Anders' case?
How might considerations related to disability have affected arguments presented by his reviewers?
Identify positive and negative considerations.

What considerations related to disability affect perceptions of Anders' performance? Identify positive and negative considerations.

Assume that a tenure decision is essentially a "bet" on the academic potential of an individual based on past performance within a given context. What information would you like to see in Anders' case that would help you make this decision?

Sophia Richards

[Issues: how technology gets evaluated in social sciences, promotion to full, age]

Sophia Richards, having earned her Ph.D. in Science and Technology Studies from Rensselaer Polytechnic Institute, spent six subsequent years doing development work with the Carnegie Foundation before joining a prestigious research university as an associate professor. Her research described how changing electronic technologies affect the formation of world markets; her particular specialization concerned electronic bank interfaces in southeastern Asian economies. By the time she joined the university, she had established a body of research (in terms of quantity and quality) equivalent to that of an associate professor, so her initial university appointment was made at that level, but she was a decade older than the typical beginning associate professor.

Richards earned tenure in her second year at the university, as she continued her previous high rate of productivity measured by cited papers and funding. In her first four years, the number of her papers, their citations, and the amount of funding she received were among the highest in her college. She typically taught the introductory course in Asian area studies, an upper division undergraduate course in Asian microeconomics, and a graduate course on science, technology, and developing nations. Students flocked to her courses and provided her universally excellent teaching scores.

In her fifth year, Richards was awarded funding from the Rockefeller Foundation to establish a lecture series and to support some fellowships in Southeast Asian economics for graduate students to collaborate with her on research. She also designated some funds to buy her out from some undergraduate teaching.

Connected with the Rockefeller project, Richards established a website to publish research on technological breakthroughs in international economies, and proceeded to develop it into the only electronic journal in the field. Although all of her previous work appeared in print journals, she began to publish about 30-40% of her papers through the website as of her fifth year at the university.

In her sixth year, Richards built on her development success with Rockefeller by securing a substantial endowment from alumnus Gregory Chan, who had never before donated to the institution. Chan was impressed with her scholarship, her coordination of the Rockefeller lecture series, and her energy and diligence in expanding the curriculum in international studies of science and technology. He designated the endowment for a distinguished chair for a scholar in technologies of markets to be named at some near future date.

During that same year, Richards became more involved with the web journal, publishing two-thirds of her papers electronically on her own web journal. Richards came up for promotion to full professor based on her new work (20 articles on the website and 10 additional papers in scholarly print journals), the Rockefeller grant, and having fostered the endowment. It is widely understood that such a promotion is necessary for her to be eligible for the Chan chair. There are rumors among faculty in her college that some sort of deal has been made with Chan that Richards should be awarded the Chan chair.

Although Richards' record is generally regarded as within the acceptable range for a promotion to full professor, several concerns are raised by members of the promotion committee regarding whether she has relied too closely on her Carnegie contacts in receiving the Rockefeller funds, whether her scholarship has recently slipped in that much of it appears on the website the Rockefeller project sponsors (some faculty express concerns whether those papers are properly reviewed in the context of an electronic journal that she edits), and whether she has tried to leverage the system in recruiting a large donation for a chair that seems designed for her.

Question:

How would you consider such concerns in the context of evaluating whether Richards ought to be promoted to full professor?

Robert Sorel

[Issues: soft vs. hard research, joint appointment, advanced assistant professor]

Robert Sorel earned PhD from Cornell in Aerospace and Mechanical Engineering, writing a dissertation on computational methods for modeling ion propulsion systems for space exploration, and joined the faculty of a prestigious research university as an advanced assistant professor jointly appointed to AE/ME (primary appointment in AE), after working four years in a AE/ME department at Princeton University. Sorel moved to the new university for personal and professional reasons. He desired to move his family closer to extended family, and he wanted to collaborate more closely with his new university's AE/ME research center on propulsion systems.

Sorel's research field is fairly new to the university, recently attracting attention to the work of a number of highly regarded researchers from respected programs of engineering and physics. After being at the university for one year, he published a paper with two colleagues and four graduate students in a top-tier journal. After two years at his new university, Sorel and collaborators attract a great deal of funding, some from the National Science Foundation and some from the aerospace industry. They published their results in three of the top journals in the field on a consistent basis. Sorel has published at a rate somewhat above that of his peers in such journals, but has maintained a funding level twice the average per capita funding in the AE department over the past four years.

The youthful, exuberant Sorel and a collaborator shared an award for a paper in his second year at the new university from a division of his professional society. The focus on their work earns Sorel a number of invitations to speak at international symposia, and sometimes other team members.

The success of their modeling effort encouraged Sorel's team to start up a company consulting with aviation manufacturers. Although Sorel requested a one-year leave of absence to develop the company, his chair refused to grant it, citing the need for Sorel to establish himself at this university. The team nevertheless manages to spin off a company, which Sorel directs in his hours off campus.

Never assigned undergraduate courses, Sorel taught only graduate students specializing in his field. He received excellent evaluations from a relatively small number of students, who comment on how much they enjoy the congenially competitive atmosphere of his classes and lab. He also advised a student receiving best student paper from professional society.

Sorel served as a member of departmental speakers' committee. Most members of his unit regarded him as a difficult person to work with and made every attempt to avoid collaborations in teaching and research. He was not appointed to any other unit committees, nor has he been appointed to higher-level committees outside the unit.

Letters of reference for Sorel that were provided at the time of promotion and tenure were very positive, noting his quick start in a cutting-edge field and the significance of his research. Two prominent potential referees that Sorel did not know personally decline the opportunity to send letters, citing time issues.

Discussion in the unit-level promotion and tenure committee centers on the intrinsic value of Sorel's work, questioning whether the computer modeling he is personally credited with developing is as significant as the "hand-picked" reviewers suggest and whether this kind of research is "substantial" enough to earn tenure. One member also raises the issue of Sorel's difficult personality as a problem affecting the scheduling of undergraduate courses and his lack of service contributions. Another member cites discomfort with Sorel's manner of socializing with graduate students, hosting frequent social events with them, dressing casually like them, and spending considerably less time in social settings with faculty in the department, attending receptions for prominent seminar speakers, and so forth. This point is not picked up for further discussion. The committee chair recollects information he had heard at lunch about Sorel's startup company and how it had been pursued against the wishes of the department chair; he suggested that perhaps Sorel needed to decide where he wanted to devote his interests and energy – in academia or industry. As Sorel was not involved in committee work or in undergraduate education, some committee members see him as lacking interest in the basic mission of the university.

Question:

As a member of the committee, how would you respond to concerns that Sorel's research is perhaps too specialized and lacks novelty, that he is very difficult to work with, and that some references apparently were not interested enough for some reason to write on his behalf?

Arthur Stevens

[Issues: publication venues, order of listing of authors, contribution to articles]

Arthur Stevens, Associate Professor in Mechanical Engineering working in the area of automatic control systems, came up for promotion to full professor after five years in grade. He published 35 articles during his 10 years at the university; 17 of these articles appeared in conference proceedings. One of his articles won a best paper award within an ASME session devoted to novel advances in control of smart structures. Stevens was almost always listed as last author of his collaborative publications, except for two papers listing him as first author. His collaborators were almost all graduate students. He never published an article, book, or conference proceeding as the sole author. He applied for one provisional patent in his sixth year, but he did not pursue the full patent agreement when it came to term.

Regarded as a capable, confident teacher who offered a range of required and elective courses needed by the unit, Stevens' teaching averages on his student evaluations ranged from 3.8 to 4.2 in undergraduate courses and from 4.3 to 4.5 in graduate courses (on a five-point scale). A number of undergraduates remark on evaluations ranging over recent years that Stevens is "very accessible" and an "interesting lecturer" who provides "wonderful illustrations and graphics" to get across his points. Although he has been nominated for his school's teaching award, he did not receive it. He teaches more courses in his technical area than his peers. Graduate students in his research group attest to his willingness to advise them regarding career prospects in academe and industry. Some students express amazement at his accessibility compared with other faculty.

Stevens managed to support his research group with a steady funding level of \$200,000 per annum average, slightly below department norms. He was a good citizen, serving diligently and effectively on several different school-level committees. As a good deal of his research has commercial application, much of his funding has come from industrial sources.

Stevens never served on university-level committees, nor did he take leadership roles in scholarly and professional organizations, although his collaborative articles have established his international research reputation in the field; two of the five articles submitted with his promotion dossier were termed "breakthrough" and "now classic" by two external reviewers. One committee member comments that it is her understanding that his field is fairly specialized and small, so it is possible that the reviewers are too familiar with the candidate; she points out that both glowing reviews come from faculty who shared the same graduate institution as Stevens.

Some members of the school-level promotion and tenure committee endorse promoting Stevens to full professor because he is a good citizen and a "good guy." They argue that if he does not get promoted, it might upset him and there is no point of that. Others question whether his publication record is adequate for such a promotion. One member is concerned that 17 journal articles in ten years "aren't competitive," as many current applicants who have done post docs already have 5-10. Another member is concerned that only half of Stevens' papers are from refereed journal articles, while yet another member argues that as the last author, Stevens had little technical input into these papers.

Questions:

As a member of the committee, how would you respond to these concerns about Stevens' contributions to publications?

How would you ensure that Stevens receives a fair evaluation?

Pam Lee

[Issues: fluctuating productivity of a maturing scholar, ethnic/cultural differences]

Pam Lee, who earned a Ph.D. in Economics from the University of Chicago, was hired by a prestigious research university's management program to teach econometrics. Although she is one of a dozen economists on campus, she is only the third econometrician and replaces a retiring star in the field, someone considered an anchor of a graduate program ranked in the top three in the nation. Lee's very prominent graduate advisor highly recommended her as his best student in the past decade, indicating that her dissertation was "groundbreaking" and "revolutionary" in creating a new theoretical model for the field.

A deferential, somewhat quiet person unless probed about her research, Lee had a rocky start with her university colleagues and students. Some undergraduates complained to the undergraduate coordinator about her accent, and some graduate students reported that Lee is "too rigorous" "especially concerning statistical analysis." Although the preponderance of faculty in the department see Lee as merely "young" and "a little shy," two faculty members express concerns to the chair during her first term about Lee's "inability to socialize" and "fit in." The chair, also an Asian immigrant, regarded Lee as undergoing the typical adjustment period of a new faculty member struggling to shift from star graduate student to novice teacher while keeping up a high research profile. The chair encouraged a sympathetic senior faculty, not directly in her research area, to mentor her. After an initial lunch meeting with Lee to offer his mentoring input, the senior faculty member drifted away from the arrangement, too busy to set appointments.

During her first three years at the university, Lee presented four conference papers on sophisticated, technically rigorous statistical analysis methods, complementing the work she did in her dissertation; she also published one journal paper based on her dissertation. She improved her undergraduate and graduate teaching ratings by working with professionals at the university center for teaching and managed to attract two graduate students to work closely with her. She also expanded departmental offerings in her field and created a sequence of two undergraduate courses in econometrics.

At the time of her third-year critical review, her chair conveyed the review committee's warning about her lack of publications. He encouraged her to stay in touch with him and to work closely with two other colleagues "to generate more papers." Although initially taken aback by this criticism, Lee agreed with her chair that she would "appreciate some advice." She sought out faculty her chair helped identify as her mentors, sharing two new conference papers with them and asking them for editorial criticism and guidance on improving her publication record.

Although the two mentors worked in different fields, they recognized that Lee's papers were hampered by her awkwardly written English and her tendency to rely solely on complex formulas to demonstrate her argument. One suggested that Lee bone up on her grammar and general writing skills by studying an English composition text, and the other encouraged her to read *The Wall Street Journal* and some American novels to develop a more fluid style. They also encouraged Lee to think about applications of her theoretical models to their fields, finance and macroeconomics.

Lee worked hard to improve her English and accepted the offer to collaborate on an article with one mentor. He devoted time during the process of co-writing to show her how to put together a scholarly argument, and he helped her understand how they could manage the journal reviewers' comments in revision. Lee's other mentor took a less active role in improving her productivity, suggesting two applications of her theoretical method that might prove promising. She wrote one paper designated for a journal suggested by this mentor, who offered comments before she submitted it. Benefiting from the advice and contributions of these senior scholars, Lee managed to get two articles (one collaborative) accepted in her fourth year. In her fifth year, she wrote two archival papers, one with her previous collaborator and another on her own, which were also published. Her mentors compliment her on greatly improved writing skills.

One mentor, fascinated by Lee's application of her theories to his subfield, developed and submitted a proposal for funding based on this method to an agency, citing their joint paper as the basis for the work. However, Lee was neither consulted nor included in the development of the proposal or as a co-investigator. She was visibly upset when she learned of this proposal from another colleague who informed her that her mentor is now working in the same field. After Lee confronted her mentor, he informed her that there is no monopoly on good ideas, and he was in the best position to develop this premise within his own subfield. With that, the mentoring relation ended, but Lee decided to keep the situation it to herself given the fact that the department chair had recommended this mentor and was his close associate.

Three letters of reference commenting on her tenure and promotion case were very positive, indicating that her publications posit original, rigorous theoretical claims. Two others referred to further interesting applications. The sixth highly positive letter comes from a senior scholar, known for being Lee's mentor's first graduate student. By the time Lee comes up for promotion and tenure, she has published five scholarly articles (one in *Econometrica*, the leading journal in her field, and four applying econometric analysis to other fields), given an average number of conference papers, and participated on two department committees. A member of the promotion and tenure committee questions whether this level of productivity demonstrated largely within fields other than econometrics justifies promotion and tenure at the university. Another member cites that he has input from a former mentor that Dr. Lee is intelligent but is difficult to communicate with and to work with.

Question:

As another member of the committee, how would you respond to these concerns?

Helen Clemens

[Issues: international reputation and spousal concerns]

Helen Clemens, who earned a Ph.D. in Mathematics from New York University, joined a prestigious research university as an assistant professor of mathematics, specializing in mathematics of differential equations related to self-organizational phenomena and chaos. She was hired the same year and in the same department as her husband Joseph Smith, an up-and-coming star in set theory and fractals who was hired after working three years as an assistant professor at Yale University.

Clemens quickly established a reputation as an excellent teacher of mathematics majors. Her upper-division course in her specialty field became one of the department's most popular courses for majors. She also became known as an accessible graduate advisor who took great care in mentoring her students' professional development.

Clemens was invited to give many international presentations in her area and to become a member of a significant number of conference program committees. She was also a frequent speaker at meetings of physicists interested in application of her mathematical tools to physical systems. Some of her university colleagues in other research areas suggested that she was asked to speak so often and participate in workshops and panel discussions to fulfill the requirements of diversity, rather than for intellectual acumen, and/or that she rode on the coattails of her husband, her sometimes collaborator. While Clemens' international experiences are prestigious, they often required her to travel to Europe for meetings. She was consequently less accessible to colleagues than most peers. Most of her time on campus was spent teaching courses, advising students, or serving on institute-level committees.

By the time of her third-year critical review, she has published only five articles, albeit in important journals. Her husband collaborated on two of these articles; on one, Clemens was first author, and on the other he was first author. Their achievements were the subject of an article in *The Chronicle of Higher Education* about successful couples in the sciences. Clemens and Smith were also profiled in national newspaper articles focusing on emerging connections between biology and mathematics. Smith had established strong interactions with the biology department in applying concepts of fractals to complex hierarchical cell structures. The committee considering her third year critical review recommended warning her to accelerate publication. Her chair advises Clemens to "concentrate more on publishing and less on publicizing."

In her next two years, Clemens worked hard to publish more articles in significant refereed journals, producing four papers (one in tandem with her husband) and three articles in conference proceedings. In addition, she was listed as co-PI on one of his grants.

In coming up for promotion and tenure, Clemens was considered an excellent teacher by undergraduates and graduate students and an excellent mentor of women students. Her publication record was a bit below average, but her citation rate was higher than average, and she was well-known in Europe, for example. Letters from reviewers, two of them prominent European mathematicians, characterized her individual

work as “very good,” “substantial,” and “first-rate. Articles written collaboratively with her husband were cited as “highly influential” and “amazing.” There are no negative reviews.

Questions arise in the unit-level promotion and tenure committee regarding whether Clemens’ record of individual productivity meets the minimum standard and whether her productivity and the impact of her work depend on her husband. One member wonders if Smith (already tenured and promoted) will leave if Clemens does not get tenure.

Question:

As a member of the committee, how would you respond to these concerns about productivity and collaboration?