

May 17, 2007

PROMOTION RECOMMENDATION

The University of Michigan
School of Public Health, Department of Biostatistics

Bin Nan, assistant professor of biostatistics, Department of Biostatistics, School of Public Health, is recommended for promotion to associate professor of biostatistics, with tenure, Department of Biostatistics, School of Public Health.

Academic Degrees:

2001	Ph.D. in Biostatistics, University of Washington
1999	M.S. in Statistics, University of Washington
1997	M.S. in Statistics, Virginia Commonwealth University
1987	M.S. in Aerospace Engineering, Beijing University of Aeronautics and Astronautics
1984	B.S. in Aerospace Engineering, Beijing University of Aeronautics and Astronautics

Professional Record:

2001-present	Assistant Professor, Department of Biostatistics, School of Public Health, University of Michigan
1998 - 2001	Research Assistant, Fred Hutchinson Cancer Research Center
1995 - 1997	Teaching Assistant, Department of Mathematics, Virginia Commonwealth University
1993 - 1995	Associate Professor, Department of Industrial Engineering, Zhengzhou Institute of Aeronautical Industry Management
1987-1993	Assistant Professor, Department of Operational Management and Department of Industrial Engineering, Zhengzhou Institute of Aeronautical Industry Management

Summary of Evaluation:

Teaching -- Professor Nan is an excellent classroom teacher. His student reviews in the more advanced 800 level courses are consistently outstanding, and, in those courses, he has been able to attract students to work with him. He has also taught quite demanding introductory courses in probability and linear models to our first year Masters students and has done this very well. He is a teacher who asks a lot of his students and he is able to get the best out of them. Dr. Nan has broad interests in statistics and biostatistics and can teach a wide variety of courses. He is a very valued member of the School, who plays a key role in meeting teaching responsibilities in the more theoretical aspects of biostatistics.

Research -- Professor Nan has demonstrated excellence in research through methodological papers in the top statistics journals (including the *Annals of Statistics*, *Biometrika*, *Biometrics* and the *Journal of the American Statistical Association*) and extensive contributions to collaborative research. His methodological contributions are in the general area of survival analysis and incomplete data. His work has practical importance, but it is also developed and presented at a high theoretical level so that his work is also impacting statistical theory. Important examples of his work include his lead-authored papers in the *Annals of Statistics* and the *Canadian Journal of Statistics* on missing data problems in the Cox survival analysis model, his work on the accelerated failure time model in *Biometrika* and *Statistics in Medicine*, and his *Statistica Sinica* paper with Yu elucidating the complex missing data methods of J. Robins and his colleagues. Another area of methodological development is the analysis of marker processes. Papers in *Biometrics* and the *Journal of the American Statistical Association* describe two new and complementary statistical methods for analysis, one involving variable regression coefficients and spline methods, and one using a model for the cross ratio function in bivariate survival data. Dr. Nan has also been very active and successful in collaborative work. He lists about 25 collaborative publications, and, as with the methodological work, his rate of publication is increasing. Dr. Nan is well funded with a substantial portion of his salary covered through research activity, and he clearly plays an important role in much of that work. He has recently been seeking funding for his methodological work and received a strong score with a 30 percentile ranking on an R01 application to NIH. He also has a proposal submitted to NSF, which I understand has a strong chance of funding.

Recent and Significant Publications:

- Cabana MD, Rand C, Shish KK, Nan B, Davis MM, and Clark N. Pediatrician self-efficacy for counseling parents of asthmatic children to quit smoking. *Pediatrics*, Vol. 113, No. 1, 78-81, 2004.
- Nan B, Emond M, and Wellner JA. Information bounds for Cox regression models with missing data. *Annals of Statistics*, Vol. 32, No. 2, 723-753, 2004.
- Nan B. Efficient estimation for case-cohort studies. *Canadian Journal of Statistics*, Vol. 32, No. 4, 403-419, 2004.
- Nan B, Lin X, Lisabeth LD, and Harlow SD. A varying-coefficient Cox model for the effect of age at a marker event on age at menopause. *Biometrics*, Vol. 61, No. 2, 576-583, 2005.
- Weybright P, Gomez-Hassan D, Maly P, Rohrer S, Junck L, Nan B, and Sundgren PC. Differentiation of tumor recurrence from treatment related changes using 2D-CSI MR Spectroscopy. *American Journal of Roentgenology*, Vol. 185, No. 6, 1471-1476, 2005.
- Sundgren PC, Jennings J, Attwood JT, Nan B, Gebarski S, McCune WJ, Pang Y, and Maly P. MRI and 2D-CSI MR spectroscopy of the brain in the evaluation of patients with acute onset of neuropsychiatric systemic lupus erythematosus. *Neuroradiology*, Vol. 47, No. 8, 576-585, 2005.
- Bogot NR, Kazerooni EA, Kelly AM, Quint LE, Desjardins B, and Nan B. Interobserver and intraobserver variability in the assessment of pulmonary nodule size on CT using film and computer display methods. *Academic Radiology*, Vol. 12, No. 8, 948-956, 2005.
- Zhai Y, Hotary KB, Nan B, Bosch FX, Muñoz N, Weiss SJ, and Cho KR. Expression of membrane-type 1 matrix metalloproteinase is associated with cervical carcinoma progression and invasion. *Cancer Research*, Vol. 65, No. 15, 6543-6550, 2005.
- Daly CP, Cohan RH, Francis IR, Caoili EM, Ellis JH, and Nan B. Incidence of acute appendicitis in patients with equivocal CT findings. *American Journal of Roentgenology*, Vol. 184, No. 6, 1813-1820, 2005.
- Packer MM, Kaur JS, Hodge FS, Nan B, Trapp MA, and Roubidoux MA. A survey of attendees at Native American health care conferences: Knowledge, attitudes, and practices about cigarette smoking. *Journal of Cancer Education*, Vol. 20, No. 2, 89-95, 2005.
- Cabana MD, Birk NA, Shish KK, Yoon EY, Pace K, Nan B, and Clark NM. Exposure to tobacco smoke and chronic asthma symptoms. *Pediatric Asthma, Allergy & Immunology*, Vol. 18, No. 4, 180-188, 2005.
- Nan B, Lin X, Lisabeth LD, and Harlow SD. Piecewise constant cross-ratio estimation for association of age at marker event and age at menopause. *Journal of the American Statistical Association*, Vol. 101, No. 473, 65-77, 2006.
- Ortiz AP, Harlow SD, Sowers M, Nan B, and Romaguera J. Age at natural menopause and factors associated with menopause state among Puerto Rican women aged 40-59 years, living in Puerto Rico. *Menopause*, Vol. 13, No. 1, 116-124, 2006.

Service -- Professor Nan has served as an active member on many committees. He has served for two years on the department's candidacy committee, which develops the qualifying examination each year for students entering the PhD program. He has been a key member of search committees in biostatistics, has served on a number of ad hoc committees, and served for two years on the department's admissions committee and also on the curriculum committee. In all of these assignments, he has been very willing to do his share and more. At the university level, Professor Nan serves on the Preeclampsia Study Data and Safety Monitoring Board (U of M). He has also served on a faculty search committee in the Department of Radiology where he has had a partial appointment and has served as a resource for faculty research. He also serves as a member of the Diversity Task Force in the School of Public Health. Dr. Nan has been very active as a reviewer for many journals in biostatistics and statistics. Included in his list are many of the strongest journals in these areas. He is also a member of the American Statistical Association, the Institute of Mathematical Statistics and International Biometrics Society.

External Reviewers:

Reviewer (A): "Dr. Nan has demonstrated his capability as an independent researcher. His work is important, original, and of high quality, and he starts to have national recognition. He has a strong command of technical issues, while at the same time is making very nice contributions to applications."

Reviewer (B): "Dr. Bin Nan has made significant contributions to several important areas in biostatistics, including survival models with missing data, case-control and case-cohort studies, evaluation of association between marker event and survival time. I believe Dr. Bin Nan has earned national recognition for his work on semiparametric models and survival analysis and has accumulated an outstanding record for promotion to Associate Professor with tenure. In particular, I believe that, with his record, he would be promoted to Associate Professor with tenure in my institution."

Reviewer (C): "Dr. Nan has made important methodological contributions to the statistical literature in addition to what is clearly a very productive record of collaboration. ...Dr. Nan's teaching and service record at the University of Michigan should play an influential role in the tenure decision. ...I found Dr. Nan to possess considerable integrity and openness in our scientific discussions."

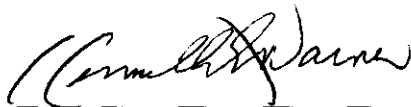
Reviewer (D): "Dr. Nan's area of methodological expertise is in semiparametric efficiency calculations for complicated biostatistical estimation (eg., regression models for case-control data). This is technically a very hard area, but clearly Dr. Nan has mastered this and is able to do important, cutting-edge research in this area. Dr. Nan is nationally and internationally recognized for these contributions....From what I can determine... he is a very qualified and conscientious teacher who is able to both challenge and communicate well with the students."

Reviewer (E): "First, he is one of a relatively small group publishing in the important area of missing data problems, with particular reference to semiparametric efficient methods....Second, he is working on important problems, particularly in the area of survival models in case-cohort studies. His papers in two of the three most prestigious statistical journals are well known to workers in this field. He is a regular attendee and presenter at statistical meetings where he has many interesting things to say."

Reviewer (F): "Professor Nan is a reputable biostatistician who has made solid contributions to the development of statistical theory and methodology through a series of seven methodology papers, most of which are in our top statistical journals... The frequent invitations to professional meetings and academic institutions attest to his visibility."

Summary of Recommendation:

Professor Nan has been outstanding in all aspects of his work. He has a superb record as teacher and student mentor and is a contributor in many ways to the school, the university and the profession. His strong teaching and collaborative abilities and rising reputation in methodological expertise in biostatistics make this promotion most appropriate. With the support of the Department of Biostatistics, the School of Public Health Advisory Committee on Academic Rank, and the School of Public Health Executive Committee, I enthusiastically recommend that Bin Nan be promoted to the rank of associate professor of biostatistics, with tenure, Department of Biostatistics, School of Public Health.



Kenneth E. Warner
Dean, School of Public Health

May 2007