



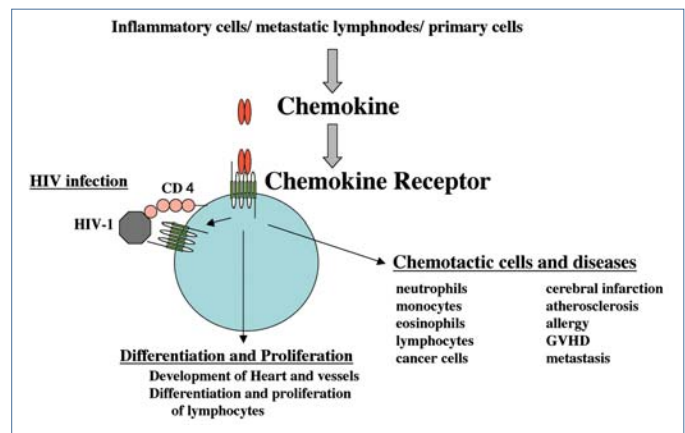
# Social Medicine

## Molecular Preventive Medicine

<http://www.prevent.m.u-tokyo.ac.jp/>

Chemokines play critical roles in the pathogenesis of diseases including acute inflammation, autoimmune diseases, allergic diseases, HIV infection, atherosclerosis and tumor metastasis through the regulation of chemotaxis, activation and differentiation. We hope chemokine research will contribute to Molecular Preventive Medicine.

- Pathogenesis of diseases by chemokine
  - Autoimmune diseases, liver injury, GVHD
  - Atopic dermatitis, bronchial asthma
- Activation of the chemokine receptor and its signal transduction
- Serial analysis of gene expression (SAGE) for hematopoietic cells
- Development of vaccinations to cancers and infectious diseases



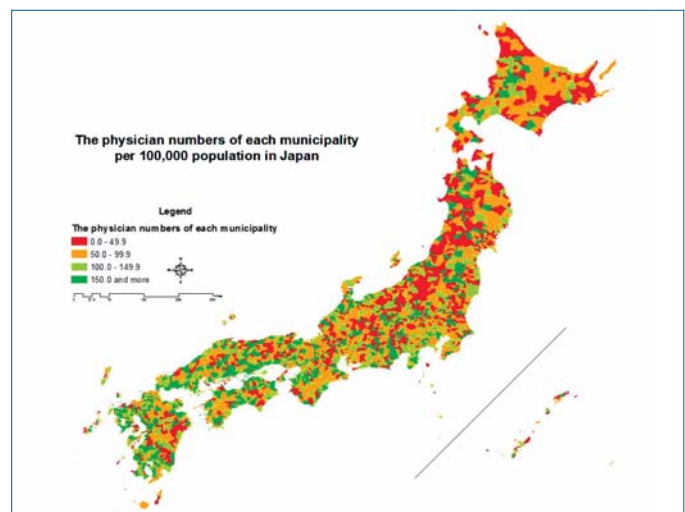
## Public Health

<http://publichealth.m.u-tokyo.ac.jp/>

Public health is the science and art of preventing disease, prolonging life, and promoting health and quality of life (QOL) through organized community effort. Through studies in various fields and laboratories, our department aims to advance research, support policy development, and promote education toward these ends.

- Efficiency and equity issues of health services
- Health manpower policy
- Occupational and environmental health
- Policy analysis on health and environmental issues
- Clinical epidemiology (QOL, outcome studies, economic evaluation)

Physician distribution by municipality in Japan



We determine the cause of death in unnatural deaths through autopsy and various examinations. We also study on legal-social systems related to death investigation, patient safety, and court. To improve death investigation and related systems, we conducted variety of researches including cardiovascular basic sciences, legal-social medicine, toxicology, DNA polymorphism, and forensic pathology.

- Involvement of Gap Junction in myocardial injury in ischemic heart disease and arrhythmogenesis in restraint
- Arrhythmogenesis and contractile dysfunction in pressure overload
- Legal-social systems related to death investigation, patient safety, and court
- Improvement of toxicological and DNA examinations
- Forensic pathology



*Forensic autopsy room*

## Medical Informatics and Economics

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The role of research and education of this department is provided as the department of the graduate school, and the role of practical management is conducted as the Department of Planning, Information and Management in the University of Tokyo Hospital. All teaching staffs are in charge of both the two roles and the department of health informatics of school of public health. The research and postgraduate education programs cover basic medical informatics, advance applications of information technology for clinical practice, technology assessment and standardization of healthcare information.

- Development and application of clinical ontology
- Research for sharing healthcare data among medical institutions and hospitals, and the application for clinical epidemiology
- Extraction of medical knowledge from electronic medical record database using natural language processing
- Development of knowledge-driven real time alerting system in clinical practice
- Evaluation study of hospital management and analysis of medical resource placement



*Computer room of the hospital computer center*