

1

沿革と展望 History & Prospects

医療疫学分野の沿革

2000

- 京都大学大学院医学研究科に、我が国初の社会医学系の大型専門大学院である社会健康医学系専攻が設置される
- 同専攻 健康解析学講座 理論疫学分野発足
福原俊一 教授、笠島茂 助教授（～2003年）着任
- 1期生 東尚弘（博士課程）、山崎新（修士課程）入学
- 「睡眠の質とQOLに関するコホート研究」（北海道）開始



2001

- 国際QOL学会環太平洋集会（International Society for Quality of Life Research, Pan-Pacific Conference）を日本都市センター会館（東京）にて開催（2001年4月13日・14日）。福原俊一が学会長を務める

2002

- 社会健康医学系専攻（修士課程）が社会健康医学系専攻（専門職学位課程）となる
- 全国調査「腰痛のアウトカム研究」実施（日本整形外科学会研究助成）

2003

- 「理論疫学」から「医療疫学」に分野名変更

2004

- 森田智視 講師（～2006年）着任
- 鈴鴨よしみ 助手（～2006年）着任

2005

- 社会健康医学系専攻の特別コースとして「臨床研究者養成コース」（Master of Clinical Research（MCRコース））を開設（コース・ディレクター／福原俊一）
- 教室を総合解剖センターより新棟：医学・生命科学総合研究棟（G棟）へ移転
- 東尚宏 特定助手（～2007年）着任



2006

- 林野泰明 特定助手（現、特定准教授）着任



2007

- 山崎新 准教授着任

2008

- MCRコースが概算要求にて文部科学省より正式分野として承認を受ける（臨床情報疫学分野）
- 厚生科学研究「臨床疫学研究に活用可能な診療情報プラットフォーム構築」研究開始（研究代表者／福原俊一）
- 運動器コホート研究開始（福島県立医科大学との共同研究）
- 竹上未紗 特定助教着任

2009

- 厚生科学研究「実現・実施可能性ある臨床研究フェロウシップ」研究開始（研究代表者／福原俊一）
- 臨床研究に関する講義の全国への遠隔配信開始

2010

- 医療疫学発足10周年記念ミニシンポジウム開催
- MCRコース1期生（博士課程学内受講生）杉岡隆が佐賀大学医学部教授に着任
- 山本洋介 特定講師着任



京都大学医療疫学分野 創立10周年記念ミニ・シンポジウム

Mini-Symposium Celebrating the 10th Anniversary of
the Department of Clinical Epidemiology and Healthcare Research Kyoto University



■ 日時：2010年3月19日 13:00-17:45 / Date: March 19, 2010. 13:00-17:45

京都大学医療疫学分野の教員、研究員、大学院生、OBなどが出席。コメンテーターには以下の先生方を迎えた。
Critiques and suggestions by guests

- 山口拓洋 教授 [東北大学]
● Takuhiro Yamaguchi, PhD, Professor, Tohoku University
- Joseph Green 講師 [東京大学]
● Joseph Green, DMSc, Lecturer, The University of Tokyo
- Thomas Inui 教授 [Regenstrief 研究所、Indiana 大学]
● Thomas S. Inui, MD, ScD, Professor, Indiana University

プログラム / Program

- ▼ 報告 The First Decade and the Next
▼ Report
▼ ● 福原俊一 教授 [京都大学医療疫学分野]
▼ ● Shunichi Fukuhara, MD, FACP, Professor, Kyoto University
- ▼ 自由討論 Converge or Diverge?
▼ Free Discussion
- ▼ 講演 Comparative Effectiveness Research and the Regenstrief Institute:
▼ Plenary lecture A Future Vision for Clinical Research?
▼ ● Tomas Inui 教授 [Regenstrief 研究所、Indiana 大学]
▼ ● Thomas S. Inui, MD, ScD, Professor, Indiana University

Thomas Inui 教授

Thomas Inui 教授は、Johns Hopkins 大学医学部を卒業後、内科学、プライマリ・ケア、臨床研究のリーダーとして活躍し1992～2002年 Harvard 大学教授および副医学部長を勤めた後、現在に至っている。Institute of Medicine 会員。また2000年には、東京大学医学教育国際協力研究センター (IRCME) の初代客員教授として、東京大学および日本の医学教育改革に基大な貢献をした。



The First Decade and the Next

Shunichi Fukuhara, MD, FACP

Founder and Professor, Department of Epidemiology and Healthcare Research, Kyoto University

The First Decade and the Next Report

Shunichi Fukuhara, MD, FACP
Founder and Professor
Department of Epidemiology and
Healthcare Research
Kyoto University

Darkness: 2000-02



Dawn: 2003-04



1 :

We are young. Our home institution, Kyoto University, has more than 100 years to look back on, but we have only 10. Recalling our history, we use five D's: Our founders began in Darkness. Then came the Dawn. We took risks like a Daredevil, and we Developed. Some day, our founders will pass the baton to their Descendants.

This is our story.

2 :

The department head (Fukuhara) was double appointed at Kyoto University and the University of Tokyo. Commuting between Tokyo and Kyoto every week became tiresome. The original name of the Department (Theoretical Epidemiology) was handed down from above. It was not chosen by anyone in the Department. We started the Department with no mission. We started small, with only one Professor and one Associate Professor, in only 60 square meters. At first we had only one MPH student (Shin Yamazaki) and one PhD student (Takahiro Higashi) . Other departments in the Graduate School of Medicine were ignorant of us, and they ignored us. Sadness.

But there was a hint that the future could be bright: Professor Inui kindly came to Kyoto University to encourage our Department and the School of Public Health.

3 :

By 2 years later we could see some light.

First: Fukuhara remembers an important event: "I recall when the head of orthopedic surgery at a different university sent me a kind letter. It was not an e-mail, it was a 3-page letter. I don't know how he found me." As a result of that contact, we started an outcomes study on low back pain with funding from the Japanese Society of Orthopedic Surgery. This yielded several articles, including a very interesting one that was accepted by the first-class journal, *Spine*, 'Discrepancy Between Disability and Severity of Low Back Pain: Demographic, Psychologic, and Employment-Related Factors'. The first author was a member of our second group of MPH students. Since then, our relationship with orthopedic surgeons has remained close, and together we recently created a very unique study, the 'locomotion cohort study.'

Second: For 20 years, Fukuhara had dreamed of creating a program to train clinical investigators. While at the University of Tokyo, he and Dr. Green had together made a prototype of such a program. In 2004, Fukuhara saw a chance to realize that dream. He was a member of the Dean's committee for future planning. The chair of that committee wanted to reinvigorate the Master's and PhD programs in medicine at Kyoto University, as one way to compete against other leading universities. In addition to a Basic Science path and a Physician-Scientist path, the chair wanted something new: a Clinical-Investigator path. He asked whether Fukuhara had any idea about how to do it. Fukuhara answered "YES!"

Daredevil: 2005-06

We took the risk.



4 :

With the start of the Master of Clinical Research (MCR) program in 2005, our Department reached a turning point. The Dean gave us two years to make the new program work, and he said "If you can't attract students, your trial is over. Succeed or perish!" It was risky. We had no budget for it and no faculty members dedicated specifically to it, but we went ahead. We knew that we could not attract busy clinicians from universities and teaching hospitals to spend two more years as students, so we proposed a one-year Master's degree program. We conducted a survey, and found that people might not attend if it lasted longer than 4 months. So we concentrated the core curriculum of epidemiology and biostatistics into 4 months. After those 4 months, the doctor-students could return to their hospitals but still stay in the MCR program. We had space for only five MCR students the first year, and we tried to advertise the program to all young doctors in Japan. Eventually, we got fifteen applications for those five slots, which gave us some confidence. We took the risk. Fortunately, 3 other departments in the School of Public Health decided to participate and collaborate with us: Health Informatics, Preventive Medicine, and Health Economics (and later Pharmacoepidemiology)

5 :

Some of those who applied to the MCR program came from the summer camp (臨床研究デザイン塾), which also began in 2004 and is Fukuhara's activity with a non-profit organization outside the university. Each year, 12 young nephrologists come together for one week over the summer. Very intensively, we try to teach them the spirit of clinical research and basic clinical research skills. In some cases, this stimulated them to interrupt their careers for more schooling, and it changed the course of their professional lives.

Summer Camp for young clinicians



2005: Office moved

New



Old



6 :

Our first office was a cramped space in an old building. In 2005 we moved from there to a much larger space in a newly constructed building. Having our own conference room made a difference. The whole staff got a psychological boost.

Parties



7 :

Slowly, we grew.
And when we had success, we celebrated.

Do, do more, and develop: 2007-10



- 2007 Velocity of publication increased
- 2007 External funding increases, more faculty members are hired
- 2008 MOE approved MCR as the formal educational unit
- 2010 **The first Professor** from alumni!

8 :

We did more and more. Our Department really bloomed and developed. This may have started around 2007, when the velocity of our publications increased. We also started getting 4 or 5 applications to our Master's or Ph.D. program each year from very bright students.

At the same time, we started to get 2 or 3 times as much external funding, so we hired more faculty members and assistants. The MCR program continued, and finally, in 2008, the Ministry of Education approved it as a formal educational unit. By March 2010, there were 44 alumni, including 14 from the Ph.D. program. Also in 2010, one of our alumni became a full Professor. Our first Professor of Primary Care Medicine was born, and it was a real joy to our Department.

Descendants: 201?

Passing the baton to a new generation of risk takers



9 :

Starting this Department was like taking a big, risky step out into the void. Some day, our founders will pass the baton to a new generation of risk takers. Who knows where they will land?

医療疫学教室10周年記念シンポジウム、 福原教授によるレポート「最初の10年、これからの10年」に関するコメント

Thomas S. Inui, Sc.M., M.D.

President and CEO, Regenstrief Institute; Sam Regenstrief Professor of Health Services Research
Associate Dean for Health Care Research, and Professor of Medicine, Indiana University School of Medicine

私自身の人生哲学が人生の分岐点で「最も困難なものを選択する」ことであることは既にお話しました。しかし、いつも言うのですが、これは人にも同じようにしなさいと勧めているわけではありません。単に私がやってきたことをお伝えしているだけです。では、なぜそうしたか？それは、一つ一つのステップにおいて、それが新たな発見や自分自身の学びを最大化する選択だと知っていたからです。学びや発見は研究のまさに中心、「心」にあたる部分に存在するのです。

皆さんは今、新しいネットワーク作りの「実験」を進めているのです。学びの一過程としてこの研究室を選ぶ人、キャリアの土台を築くために来る人、などから構成される研究者のコミュニティを作ろうとしているのです。学びや研究をともにする人達です。この会場の後ろのテーブルの上には皆さんが共同で執筆され、世界的水準のpeer-review専門誌に掲載された論文が沢山展示されていますね。それらは臨床研究の領域で学びの旅をしている多くの医師たちのコミュニティとの共同作業でもあったわけです。私が言う「実験」(ランダム化された臨床試験ではなく、結果の分からないことに挑戦する行為のことですが)とは、これらの医師の教育に投資し、彼らに研究上のツールを与え、互いに繋がっている人間のネットワークを構築する行為を指します。

I told you that my own personal philosophy has been “to do the most difficult thing” at each divide in the road. Please remember that I always say this is not advice to anybody else. It’s only a report of what I have done. And why did I do it? I did it at each step because I knew that it would maximize discovery and maximize my personal learning. Learning and discovery are at the very heart and mind (心) of research.

I notice that you are ‘experimenting’ with network formation. You are building a community of researchers who come here for a portion of their education and professional preparation. They learn something from you and some of them go on to do research with you. The table in the back of the room is covered with your publications in peer-reviewed journals of international quality of the work that you have done with one another but also with this community of physicians who are on their own journey of discovery in clinical research. The ‘experiment’ (I don’t refer to a randomized clinical trial – I mean to denote an act with unknown consequences) is to invest in the education of these clinicians, providing them with tools for research in order to build a network of people who are connected to one another.

「サマーキャンプ」はそのネットワークを構築する上で非常に重要な1つのステップだったと思います。サマーキャンプは北米では子ども達が行くキャンプのことで、子ども達はそこで遊びや冒険に没頭します。その精神が研究に持ち込まれると、コミュニティを結束させる強力な道具となります。今後、「私もあのサマーキャンプに行ったことがあります」という言葉が、皆さんの造った臨床研究者ネットワークの合言葉となるかも知れませんね。実は人類遺伝学という分野の創設も同様な経緯を辿りました。Victor McKusickは人類遺伝学の父と呼ばれています。彼はジョンズ・ホプキンス大学の循環器の専門医で、click-murmur syndrome (僧帽弁逸脱症)を発見した人物ですが、この研究をさらに進めて人類遺伝学の父となりました。彼はMaine州、Bar HarborのWoods Holeでサマーキャンプを始めましたが、スタート当時は興味をもつごく限られた人々しか集まりませんでした。初めは、何らかの細胞学的な形で出現する劣勢遺伝子異常が研究対象でした。2つの対立遺伝子が形質異常を示したときに発現する病気です。McKusickは小さなコミュニティの中で結婚を繰り返すアーミッシュの家族を対象に研究をしていて劣性遺伝子異常による疾患に関心を持ちました。彼らに生まれてくる子どもには先天的に体型や代謝の異常が見られます。今日基礎科学の土台となっている人類遺伝学は、サマーキャンプ-海辺の美しい町で夏の一週間を過ごし、ヒト遺伝子について学び始めたこと-にその起源があるのです。今、皆さんは、新たな学問分野のコミュニティの始まりとなるサマーキャンプを創設されたのかもしれませんが。当時の人類遺伝学が当時の医療に多くの影響を与えたように、皆さんの努力が現代における新しい科学の土台となって実を結ぶことを心より願っています。

I think your invention of ‘summer camp’ may be a very important step to have taken in this network formation. In North America summer camp is where children go to learn something and have fun – an adventure. That same spirit, if carried into research, becomes a powerful community-binding force. “Oh, I went to summer camp at Kyodai” might become a motto for your network of clinical researchers. I want you to know that human genetics was started in the same way. Victor McKusick was the father of human genetics. He was a cardiologist at Hopkins, a clinical cardiologist who described the click-murmur syndrome (prolapse of the mitral valve). He went on to become the father of human genetics. He started a summer camp at Woods Hole in Bar Harbor, Maine for the few people - in the beginning, very few people - who were interested. In the beginning they studied

recessive disorders, the kind of disorders that show up when you get two alleles that express themselves in a somatic abnormality. He was interested in recessive disorders because he was working with Amish families, people who marry one another within a small community and whose children had inborn errors of either body shape or metabolism. The whole field of human genetics, now a foundation for fundamental science, had its origin in going away in the summertime for a week to a nice town on the seacoast to learn something about this science of human genetics. You may have done something in establishing a summer camp that will help you build another kind of community of science. I hope you will be able to build a foundation for a new science with as many implications as the human genome has for human health in our time.

さて、このネットワークは皆さんが思っている以上の力を発揮するかもしれません。例えばサマーキャンプ同窓会のようなものが考えられます。サマーキャンプやMCRに参加した人達を今回のようなシンポジウムに招いて互いの研究について話し合い、卒業生であること、行った研究、成し遂げた業績、書かれた論文について誇らしく思えるような場にできます。たとえ卒業生の中で研究所や教育機関に進む人の割合が54%にすぎなかったとしてもそれはそれで良いのです。その他の人達はリスクを取って他にやるべき重要な使命を見つけるでしょうから。例えば厚生労働省や文部科学省、その他の行政機関で要職に付くかもしれません。山崎先生のところに人を送って環境問題による健康被害のリスク・コミュニケーションについて勉強するようにしてくれるのは彼らかもしれません。あるいは企業に行く人達がいてそのトップになるかも知れません。彼らは研究を支える資金となる新しいグラントを提供してくれるかもしれません。私がワシントン大学で行っていたClinical Scholars Programというフェロシッププログラムでは卒業生の大体63%から64%が大学や研究機関に残りましたが、その他は行政や産業分野に進みました。また、ヘルスケアを提供する組織・団体 (healthcare delivery organizations) に入って指導的立場に着く者もありました。皆、リスクを引き受けたのです。新しいことを始めるために、医療関連分野のあらゆる場所で要職についたのです。このような多様な分野で働けるリーダー達を育成することは皆さんが作り始めているネットワークの潜在的可能性の向上につながります。

You might be able to do more with this network than you have thought about doing so far. You might invent something like a summer camp reunion. You might invite your alumni to a symposium like this one, to talk with one another to find out what each one of them is doing, to be proud of their MCR graduation, of their research, of their publications. It is certainly OK if only 54% of them go into research and

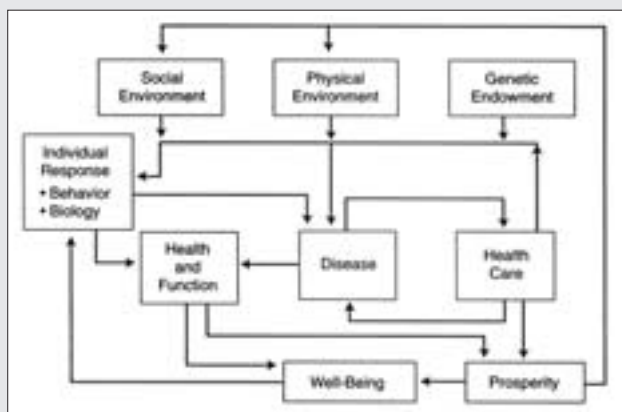
academic institutions. The others are risk takers and will find other important things to do. They might go into government, become important in the ministry of health, or the ministry of education, or in other ministries. They might be the people that send somebody to Shin (Yamazaki) to learn something about public communication of health risks. Some of them will go into industry. They might be the captains of industry. They might be the people who give you the new grants that you need to do research. In the case of the Clinical Scholars Program, the fellowship program I directed at the University of Washington, about 63% or 64% of its alumni went to academic fields, but the others went to government and industry. They also went to one other sector, which is healthcare delivery organizations, where they took leadership positions. They were all risk takers. They wanted to do new things so they went to leadership positions in all sectors of health. Producing leaders for these diverse careers would build the potential of the network that you have started.

「より困難な道を進む」という考え方は個人だけではなく組織にも適用できます。皆さんは「disruptive technology (異端技術)」の専門家と言えるでしょう。従来の専門分野の「エッジ (境界) から来た」ために新しいアイデア、概念を持っていて、医学の中央に対して大きく貢献することができます。もしも、実行力のある人達が集まっている場所で中心部分に切り込むことができたなら、皆さんは組織レベルで効果を上げることができるでしょう。私が先ほど「京都大学の中では、今誰が医療疫学に関心を持っていますか？」と質問したときに外科医と答えが返ってきたのはとても嬉しいことでした。なぜなら、外科医の特徴はといえば何かを「する」ことだからです。観念的に考えるだけでなく実行だからです。私は、皆さんのコネクションが大学内で広がっていつていることを評価したいと思います。

芭蕉の言葉にもありますように、内的には困難な道が待ち受けているでしょう。組織としても、細い道 (奥の細道)、困難な道を歩まれているのですが、それは同時に実り多き、重要な道でもあります。そして変革を成し遂げるにはもっとも安全な道でもあるだろうと思います。皆と同じようなことをしていたら、あなたにとって有利な点はありませんよね。臨床研究に変化を起させる上では、従来にない新しい方法を取ることが最も確実性の高い手法なのです。後ほど、この道を歩んでいるのがあなた方だけではないこと、皆さんが孤独ではないことをお示ししたいと思います。皆さんが関わられているトランスレーショナル・リサーチは世界中に大きなコミュニティがあるのです。

The concept of taking “the difficult path” is one that you can understand organizationally as well as individually. As an intellectual discipline, you are a “disruptive technology.” You have different ideas because you “came from the edge” of existing clinical fields and have a distinctive contribution to make to the

center. Making this contribution will have effects organizationally if you can penetrate the center in places where the people are very action-oriented. When I was asking ‘who is interested in you now at Kyodai?’, I was very happy to hear that it was surgeons who were interested in you. If there is one thing you know about surgeons, it is that they must ‘do’ something. Not just think, DO. I think it’s good that you are making connections inside the wider academic organization. It may be a difficult road to the interior (as in Bashō 松尾 芭蕉). Organizationally, you are on the narrow road (おくのほそ道), the difficult road, but a productive and important one. It is probably the most secure road to change. If you were doing what everybody else is doing, what advantage would you have? Doing something new is the most high-likelihood way to bring change to clinical research. Later I will note that you are not alone in taking this course - there is a large community, globally, interested in translational research, a field in which you are also situated. 図1



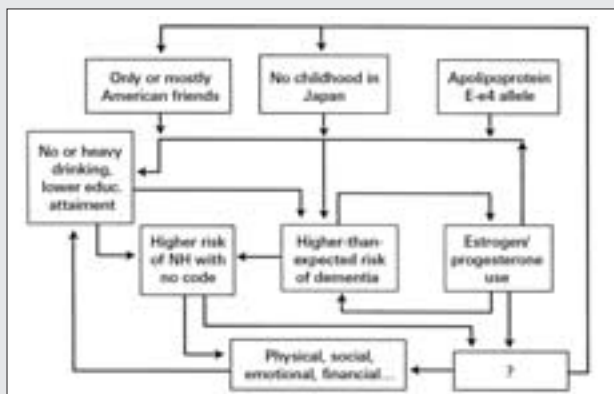
★図1 figure 1

先ほどこの研究室が行っている主要研究を「四葉のクローバー」で表わされていたので、この図がご参考になるかと思います。(図5, Social Science and Medicine, 1990, volume 31, issue 12, pp 1347-63)。これは「健康の決定要因は何か?」という重要な問いに答えようとしたものです。カナダの二人の医療経済学者、British Columbia大学のRobert EvansとMcMaster大学のGergory Stoddartによる文献調査の結果を図に描いたものです。彼らは「健康の決定要因に関して科学的文献/研究論文は何と述べているか?」という問いを設定しました。そして、図のように遺伝子、物質的環境の連鎖、社会学的環境(人が互いにどのように関わっているか)、生活習慣、生物学的特徴(長年の過食、日常的な運動などによる)などが要因として関わっていると結論付けたわけです。我々の経済状況や、宗教・信念上の習慣なども含めて上記の全てが我々の健康や、我々の身体的精神的機能(function)('健康'の定義)に影響を与えているということですね。皆さんは既にこれらに関連する問いを設定していますね、何が機能や障害に影響を与えるのか

ということ。他の人達は疾病の原因を研究していますが、私達の関心は疾病に限定されません。健康、well-beingの状態や機能を考えているのです。

医療は、大抵のお金はここに吸収されますが、一般的に言って疾病に対する治療を意味しています。ですから、私達は1つの閉じた輪にはまってしまう(図5「疾病」と「医療」を結んでいるループ。出典はEvans, Stoddartの論文)。なぜなら、全てのお金はこの輪の中に「閉じ込められた」状態だからです。しかし、健康に関心の焦点を合わせるなら、より大きな関係性の網の中のどこでも良いから、変革を起こす方法を模索しようと望むわけです。これらの関係、つながりは複雑で相互に影響を与え合うプロセスです。例えばそのシステムのどこかをいじると、影響があらゆるところに出てきます。どこを触っても、全体に変化が現れます。

As a department forming its core strategies and illustrating them with your ‘four-leaf clover figure,’ I suggest that you may wish to contemplate this figure (Figure 5, from Social Science and Medicine, 1990, volume 31, issue 12, pages 1347-63). It is an attempt to illustrate the answer to an important question ‘Where does health come from?’ It was the product of a literature review by two health economists in Canada, Robert Evans and Gergory Stoddart at the University of British Columbia and McMaster, respectively. They asked, ‘What does the scientific literature teach us about the determinants of health?’ And they concluded, as the figure illustrates, it comes from genes, the physical environment chain, the social environment (how people interact with one another), the habits of behavior we acquire, the biology we as individuals acquire (from eating too much over the years, or from exercising every day). Taken all together with our economic circumstances, and other states of well-being such as our faith or our philosophic practices, all these factors affect our health and our ability to function (the definition of ‘health’). You are already asking these kinds of questions - about what affects disability and functioning. Others do research on the origins of disease, but what we are interested in is not only disease. We are interested in health and states of well-being and function. Health care, which often absorbs all the money, is usually a response to disease, so we get caught in this loop [the loop connecting “Disease” with “Health Care” in Figure 5 from the paper by Evans and Stoddart], because all the money is ‘trapped’ in this loop. But actually we want to think about changes anywhere in this larger web of relationships if we are interested in health. This set of relationships is a complex, responsive process. If you touch such a system anywhere, it affects it everywhere. No matter where you touch it, everything changes. 図2



*図2 figure 2

シアトルで実施された一連の調査結果を例に、これら決定要因のシステムが健康にどのようにして影響を与えていくのかご説明しましょう。この研究は「カメ」スタディといいます。シアトル在住の日系アメリカ人、主に三世、四世を対象にした認知能力の低下、痴呆症に関する研究です。研究テーマは「痴呆（例えばアルツハイマー病）を予測される以上に発症するリスクを予測できる要因は何か？」でした。一連の調査を経てエストロゲンとプロジェクソンの処方アルツハイマー発症リスクを高めることが分かりました。また、他の研究で示されているように、アポリポロタンEの対立遺伝子を持って生まれた場合も、アルツハイマー病のリスクを上昇させることが、確認できました。子供時代を日本で過ごした人はアルツハイマー病にかかるリスクが減ることもこの研究で判明しました。ですから、一世は二世よりもアルツハイマーの発症リスクが低いのです。友人が殆どアメリカ人である場合はリスクを高めます。飲酒をしないことはリスクを高めるが、過度な飲酒もまた同様にリスクを高めるそうです。教育程度が低い場合もリスクが高いです。介護施設に“no code（心肺停止した際に、心肺蘇生をしないという指示）”で収容される場合も関連が見られました。経済的な豊かさと認知能力の低下には関連は認められませんでした。お金持ちであるからと言って認知症にならないということは無く、逆にお金があると認知症になるわけでもありません。最後に、身体的、社会的、感情的などSF-36の尺度で測定されるような健康関連の項目について「低い」と判定された場合、認知能力低下リスクは高くなる傾向が見られました。

どうしてこの話をご紹介したかと言いますと、つまり、今、皆さんは四葉のクローバーでこの教室の研究活動を表現されましたが、実際には「葉っぱ」（健康の決定要因）はもっと沢山あって、皆さん一人一人は研究室の中でばらばらに独自に特定の健康の決定要因を研究していると感じている（例えば、竹上先生は研究室で一人だけのナースですね。）と思いますが、実は皆さん全員が健康に関するある理論上のモデルを共有しているとも考えられるのです。実際のところ、専門領域はあまり関係ない

と言っていいかもしれません。むしろ、皆さんが同じ方法論を指向し、これら決定要因を測定、定量化し、互いの、関連性を分析し全体の中に位置づける技能・技術を有していて、健康という1つの概念の周りに集まってきていると表現できます。ついでに言いますと、これは社会健康医学で用いられている理論的モデルのコアの部分です。皆さんがしていることをこのような図で示すことができるなら、専門に関係なくあなた方はより大きな社会健康医学というコミュニティの一員として迎えらるるわけです。

Here is an example of how such a system of determinants affects health, from a series of research projects done in the city of Seattle. The study was called the ‘Kame’ study. It was a study of cognitive decline and dementia among Japanese Americans, mostly Sansei (三世) and Yonsei (四世), in the city of Seattle. The researchers said ‘What predicts higher-than-expected risk of dementia (for example, Alzheimer’s disease)?’ In a series of studies they proved that being prescribed estrogens and progesterones for various reasons increases the risk of Alzheimer’s disease in Seattle. Like others, they found that if you’re born with an allele for Apolipoprotein E, that increases the risk of Alzheimer’s disease. They proved that spending your childhood in Japan decreases the risk of Alzheimer’s disease. So if you are Issei (一世), your risk of Alzheimer’s disease is lower than if you are Nisei (二世). They proved that having mostly American friends increases the risk. They demonstrated that not drinking increases the risk of Alzheimer’s disease, but too-heavy drinking also increases the risk of Alzheimer’s disease. Lower educational attainment increases the risk. They proved that being in a nursing home with a “no code” order was associated with Alzheimer’s disease. There was no association between wealth and cognitive decline. Being wealthy doesn’t protect you and it apparently doesn’t hurt you either. And finally, having well-being measured as ‘low’ in physical, social, emotional, and other domains of the SF-36 is associated with a higher risk of cognitive decline.

Why am I showing you this? What I want you to do is to consider the possibility that while you may have four leaves to the clover now, there are even more ‘leaves’ (determinants of health), and while you may each feel as though you are the only person in your department interested in a particular determinant of health (for example, Misa Takegami, the only nurse), nonetheless all of you in the department may be sharing a theoretical model of health. It may be, in fact, that it doesn’t matter what discipline you are in. Instead, because of your common methodologic interests and because of your skills and abilities to measure and quantify and map these determinants, you have come together around the concept of health. By the way, this is the core theoretical model used in schools of public health. If you were to adopt a representation of what you are doing like this, then, no matter what discipline you are in, you would really be joining the larger community of schools of public health.