An Introduction of C. Yung Yu's Research at the Research Institute, Nationwide Children's Hospital (12/13/2011)

I received my major postgraduate trainings in Oxford and Cambridge, U.K., before moving across the Atlantic to Columbus, Ohio in June, 1990. During the past 21 years, I witnessed the tremendous growth and development of the Research Institute at Nationwide Children's Hospital and the Ohio State University, by which I am currently a principal investigator or a tenured faculty member.

The theme of my research projects is centered on the molecular biology and genetics of immune effector proteins in human autoimmune diseases. My research team did the original work that contributed to the establishment of copy number variations (CNVs) among healthy subjects, and determination of differential susceptibilities for immune effector gene CNVs in systemic lupus erythematosus (SLE), type 1 diabetes and rheumatoid arthritis. The discovery of common, continuous CNVs provides important conceptual and technical advance in the genetics of complex diseases.

Since joining Nationwide/Columbus Children's Hospital, 8 doctorate (PhD) students, 4 clinical research fellows, and 4 masters (MS) students successfully graduated from my laboratory. Many postdoctoral fellows, visiting professors, scholars, professional and undergraduate students performed research or collaborative experiments in our laboratory. Our research projects were sponsored by three primary NIH R01 grants and one program project P01 grant, which were focused on the immunogenetics of complement C4 in human SLE. In addition, we received awards and subcontracts from NIH and private foundations.

I have published a total of 94 research articles. During my tenure at NCH/OSU, my research team has authored/co-authored a total of 75 papers, among them were 60 peer-reviewed original articles, 7 peer-reviewed review articles, and 8 editor-reviewed book chapters. Two of our original articles from the NCH have been cited >100 times, according to the Web of Science database. Our work illustrations also appeared on journal covers twice.

Our current research focus is to decipher the patterns of variations for immune effector gene CNVs in autoimmune diseases among different ethnic groups, and to develop translational approaches to facilitate disease diagnosis, and personalized therapies based on precise genetic information.

Chack Yung Yu, D.Phil. (12/2011)

TABLE OF CONTENTS

PE	RSONAL DATA	PAGE 3
1.	CURRENT POSITION	3
2.	EDUCATION	3
3.	EMPLOYMENT HISTORY	4
4.	PROFESSIONAL EXPERIENCES A. Memberships and committees related to teaching B. Memberships and committees related to research, administration and services C. Professional society memberships (active) D. Office held	4
5.	HONORS / AWARDS / RECOGNITIONS	6
6.	RESEARCH GRANTS A. Active grant B. Pending applications C. Past national grants D. Past national foundation grants E. Past state / local foundation grants	7
7.	PEER-REVIEW ACTIVITIES A. Grant reviewer National Institutes of Health National, international and foundation grants and fellowships Local grant agencies B. Promotion and tenure reviewer C. Journal editorial board D. Journal manuscript reviewer	10
8.	TRAINEES AND TEACHING ACTIVITIES A. Mentorship Ph.D. graduates Postdoctoral research fellows / research scientists Clinical research fellows MS graduates Undergraduates, medical students and professional students	13

B. Ph.D. advisory committees

Ph.D. general examination and/or dissertation examination at OSU Graduate school representative for Ph.D. - general and/or dissertation examinations Overseas Ph.D. Dissertation Examiner

- C. Didactic Teaching
- D. Invited seminars / lectures
- E. Host to visiting scholars
- F. Host to visiting professors or seminar speakers

9. FULL-LENGTH PUBLICATIONS

21

- A. Peer-reviewed original articles
- B. Peer-reviewed review articles and protocols
- C. Editor-reviewed book chapters
- D. Editor of journal reviews
- E. Thesis or dissertation

Chack Yung Yu, D. Phil.

Office Address: Rm W402, The Research Institute at Nationwide Children's Hospital,

700 Children's Drive, Columbus, Ohio 43205-2696, USA

Office Phone Number: 001-614-722-2821
Office FAX number: 001-614-722-2817
E-mail: yuc@chi.osu.edu

Citizenship: U.S.A.

1. CURRENT POSITION

Principal Investigator, Center for Molecular and Human Genetics,

The Research Institute at Nationwide Children's Hospital, Columbus, Ohio;

Professor of Pediatrics, The Ohio State University (OSU),

Professor of Molecular Virology, Immunology and Medical Genetics, OSU.

2. EDUCATION

1977-81 **B.Sc. with First Class Honors**; Major: Biology; Minor: Biochemistry

New Asia College, The Chinese University of Hong Kong, Hong Kong

1981-83 M. Phil. (Master of Philosophy): Molecular Biology

Research topic: Studies of bacteriophage T4 gene expression

The Chinese University of Hong Kong, Hong Kong

Advisor: Kai-Keung Mark, PhD

1983-87 **D. Phil. (Doctor of Philosophy)**; Biochemistry

Trinity College and Department of Biochemistry, Oxford University, Oxford, United Kingdom

Thesis title: The Gene Structure and the Polymorphism of the Human Complement

Component C4

Advisors: Professor Rodney R. Porter, PhD, FRS, CH, Nobel laureate-1972

(10/1983 - 9/1985); and R. Duncan Campbell, PhD (10/85 - 1/87)

1987-89 **Postdoctoral Research Fellow**; Molecular Immunology

Medical Research Council (MRC) Laboratory of Molecular Biology, Cambridge, U.K. Research topic: Molecular immunology of thymocyte differentiation antigen CD1

Mentor: Dr. César Milstein, PhD, FRS, CH, Nobel laureate-1984

3. EMPLOYMENT HISTORY

10/1981 – 9/1983	Honorary Demonstrator (Laboratory Course in Genetics; Laboratory Course in Molecular Biology), Department of Biology, The Chinese University of Hong Kong.
2/1989 – 6/1990	Medical Research Council (MRC) Short-Term Non-Clinical Scientific Staff, Division of Protein and Nucleic Acid Chemistry (mentor: Dr. César Milstein), MRC Laboratory of Molecular Biology, Cambridge, U.K.
6/1990 – present	Principal Investigator, The Research Institute at Nationwide Children's Hospital (formerly Columbus Children's Research Institute), Columbus, Ohio.
7/1990 – 6/1996	Assistant Professor, Department of Pediatrics, The Ohio State University (OSU). Assistant Professor, Department of Medical Microbiology and Immunology. OSU.
7/1996 – 9/2006	Associate Professor, Department of Pediatrics, OSU. Associate Professor, Department of Molecular Virology, Immunology and Medical Genetics, OSU
10/2006 – present	Professor, Department of Pediatrics, OSU. Professor, Department of Molecular Virology, Immunology and Medical Genetics, OSU

4. PROFESSIONAL EXPERIENCES

A. Memberships and Committees Related to Teaching

1990 -2000	Faculty Member, OSU Biochemistry Program, OSU
1990 – present	Faculty Member, Molecular, Cellular and Development Biology Program, OSU.
1996 – 1997	Student Advisory Committee, Molecular, Cellular and Developmental Biology Program, OSU.
1996 – 1999	Graduate Education Committee, College of Medicine and Public Health, OSU.
1997 – 2004	Member (97, 00, 01, 02, 03, 04), Chair (98, 99, 01), Immunology Advisory Committee, Department of Molecular Virology, Immunology and Medical Genetics, OSU.
1999 – 2001	Visiting Professor, Centre for Molecular Immunology and Instrumentation, University of Western Australia, Nedlands, Perth, Western Australia, three annual visits (Host: Professor Roger L. Dawkins)
9/2001	Visiting Professor, Department of Pediatrics, Semmelweis Medical University and Hungarian Academy of Sciences, Budapest, Hungary (Hosts: Prof. Dr. George Fekete and Professor George Fust)

2001 – 2006 Course Director, MVIMG 801, Immunogenetics and Autoimmune Diseases, 3 credit

hours, Department of Molecular Virology, Immunology and Medical Genetics, The

Ohio State University (winter quarter; offered every other year)

B. Memberships and Committees Related to Research, Administration and Services

	,
1991 – 1996	Operations Committee, Children's Hospital Research Foundation (CHRF), Columbus, OH.
1994 – 1997	Institutional Biological and Chemical Safety Committee, CHRF.
1998 – 1999	Alternative Representative to G15-Meetings, College of Medicine and Public Health, OSU.
2001	Co-chair, Plenary Section on Structure and Function, Complement Associated Diseases, Animal Models and Therapeutics Workshop (10/2001), Santorini, Greece.
1998 – 2007	Interviewer, Hematology/Oncology Fellowship candidates, Columbus Children's Hospital, Ohio
2002	Chair, Round Table Discussion on MHC and Innate Immunity; Chair, Section on Innate Immunity and Complement Genetics, 7 th MHC Evolution Meeting and VIII th Complement Genetics Workshop and Conference, Perth, Western Australia
2003 – 2006	International Advisory Board, International Conference on Basic and Clinical Immunogenomics, Budapest, Hungary
2009 -	Interviewer, Endocrinology Fellowship candidates, Nationwide Children's Hospital, Columbus, Ohio
2010 –	Search Committee, Director for Center for Molecular and Human Genetics, the Research Institute at Nationwide Children's Hospital, Columbus, Ohio.
2011	Moderator of Opening Ceremony and Keynote Forum, Section Chair, 2nd Annual World Congress of Immunodiseases and Therapy, Guangzhou, China.

C. PROFESSIONAL SOCIETY MEMBERSHIPS (ACTIVE)

American Association for the Advancement of Science

American Association for Immunologists

American Diabetes Association

American Society for Human Genetics

American Society for Biochemistry and Molecular Biology

Human Genome Organization

International Complement Society

New York Academy of Sciences

D. OFFICE HELD

1978 Treasurer, University Student Union Freshmen Orientation Day, The Chinese University of Hong Kong (CUHK) 1978-79 Treasurer, Biology Society, New Asia College, CUHK 1979-80 Chairman (1979), Biology Society, New Asia College, CUHK 1979-80 Secretary, Staff-Student Consultative Committee (1979), Department of Biology, CUHK. 1993-96 Graduate Forum Chairperson (1993), Membership Chairperson (1994), Secretary / Treasurer (1995), President (1996), the ICSABER Society, The Ohio State University

HONORO / AWARRO / RECOGNITIONS

5. HONORS / AWARDS / RECOGNITIONS				
1970-75	Cognitio Scholarships (Half-tuition awards; 1972, 1973, 1974, 1975) Merits (1973, 1974); Chinese Prize (1973); Science Prize (1974) and General Good Results Prize (1975), Cognitio College (a secondary school), Kowloon, Hong Kong			
1981	Kong E. Suen Memorial Scholarship, the Chinese University of Hong Kong			
1981-83	Croucher Foundation Studentship, Hong Kong Full tuition and stipendiary award for graduate studies for a degree on Master of Philosophy.			
1983-86	Commonwealth Scholarship, U.K. Full tuition, stipendiary and travel award for graduate studies at the Trinity College, Oxford University, leading to a degree on Doctor of Philosophy.			
1987-88	Croucher Foundation Fellowship, U.K. Stipendiary and travel award for postdoctoral research in molecular immunology at the MRC Laboratory of Molecular Biology, Cambridge, U.K.			
1993	From the Heart Award, Children's Hospital, Columbus, Ohio			
1994-96	Basil O'Conner Starter Scholar, March of Dimes Foundation for Birth Defects			
1999 -	Who's Who in Science and Engineering			
2005	Certificate of Appreciation – 15 years of service, College of Medicine, The Ohio State University; Certificate of Appreciation – 15 years of service, Columbus Children's Hospital.			
2007	Featured Asian-American, Nationwide Children's Hospital Minority Month			
2010	Certificate of Appreciation – 20 years of service, College of Medicine, The Ohio State University; Certificate of Appreciation – 20 years of service, Nationwide Children's Hospital			

6. RESEARCH GRANTS

A. ACTIVE GRANTS

1R01 AR054459, NIAMS/NIAID/OD, NIH

Title: Complement Genetics and Clinical Variability of Systemic Lupus Erythematosus

Role: Principal Investigator

Time Period: 09/01/2008 - 08/30/2013

Total direct costs of the entire grant period: \$1,100,000 Total costs of the entire grant period: \$1,584,000

B. PENDING APPLICATIONS

1 R21 AR061643-01A1 (Rigby, WFC)

Title: Novel Biomarkers in Rheumatoid Arthritis

Role: co-investigator (sub-contract PI) Time period: 04/2012 – 03/2014

Impact / Priority Score (Percentile): 10%

1 R21 DK094202-01(Yu CY/ Hoffman RP)

Title: Complement in Disease Onset and Partial Remission of Human Type 1 Diabetes

Role: Contact PI

Time period: 09/2011-08/2013

Impact/Priority Score: 37 (first submission)

A1-version submitted on 11/11/2011

1P50AR063026-01, Center for Research Translation (Rovin BH)

Title: Predictive Modeling of Flares and Adverse Outcomes in Systemic Lupus Erythematosus Project 4: CNVs of Immune Effector Genes in SLE: from Genotypes to Clinical Presentations

Role: Leader, Project 4

Time period: 07/2012 - 06/2017

C. COMPETED GRANTS FROM NIH

2U54 AI057160-06 REVISED, NIAID, NIH (Virgin, HW)

MRCE for Biodefense and Emerging Infectious Diseases

Title: Flavivirus NS1, Complement Evasion, and Disease Susceptibility

Role: Co-investigator (0.12 calendar month, WOC)

Time: 04/09/2009 – 02/28/2010 Sub-contract total cost: \$48,000

1R01 AR050078, NIAMS / NIAID / NIDDK, National Institutes of Health

Title: Variations of Complement in Immunity and Diseases

Role: Principal Investigator

Time Period: 09/15/03 - 6/30/08 (no cost extension to 6/30/2009)

Total costs of the entire grant period: \$1,577,597

1 P01 DK55546, NIDDK, National Institutes of Health (Program Project Grant)

Program Director: Lee A. Hebert, MD

Title: Genetic and Clinical Risk Factors for Human SLE Nephritis

Role: Leader, Project 2

Title of Project 2: Complement C4 and HLA Class III Genes in Human SLE

Period: 6/1/01-1/31/06

Total costs of Project 2: \$1,110,730

1R01 AR43969, NIAMS, National Institutes of Health

Title: HLA class III genes and CR1 in rheumatic diseases

Role: Principal Investigator

Time period: 09/30/95 - 9/30/98 (no cost extension to 09/1999)

Total costs: \$606,010

1R01 DK49339, NIDDK, National Institutes of Health

Principal Investigator: Lee A. Hebert

Title: Genetic anomalies of C4, CR1 and FcγR in juvenile IgA-N

Role: Sub-contract principal investigator

Time period: 09/93 – 03/96

Total costs for sub-contract: \$323,824

D. COMPLETED GRANTS FROM NATIONAL FOUNDATIONS

Lupus Research Institute, USA

Title: The Role of X-linked Genes in Risk for Male Lupus (PI: Betty P. Tsao)

Role: Co-investigator

Time period: 11/01/2007 - 10/31/2010 Sub-contract total costs: \$22,500

Lupus Foundation of America Pilot Grant

Title: Gene copy number variations as disease risk and severity factors of human SLE

Role: Principal Investigator Time period: 10/01/07-9/30/08

Total cost: \$60,000

Basil O'Conner Starter Scholar Award, March of Dimes Foundation for Birth Defects

Title: Genomic rearrangements and biochemical characterization of the novel gene products of the RP-

C4-CYP21-Gene X (RCCX) modules in patients with congenital adrenal hyperplasia

Role: Principal Investigator Time period: 9/93-8/96 Total costs: \$67,000

E. COMPLETED GRANTS FROM STATE OR LOCAL GRANT AGENCIES

Comprehensive Cancer Center-American Cancer Society-Ohio Division

Title: Human retrotransposon HERV-K(C4) and cancer

Role: Principal Investigator Time period: 11/90-10/91 Total costs: \$10,000

Bremer's Fund, Ohio State University

Title: Characterization of a human retrotransposon, HERV-K(C4)

Role: Principal Investigator Time period: 1/91-12/91 Total costs: \$2,500

Ohio State University Seed Grant

Title: Structural and genetic characterization of RP1 and RP2, a pair of novel duplicated gene located in

the major histocompatibility complex

Role: Principal Investigator Time period: 4/91-3/92; Total costs: \$7,014

American Cancer Society, Ohio Division

Title: Expression of human leukocyte differentiation antigen CD1D

Role: Principal Investigator Time period: 7/94-6/95; Total costs: \$18,500

Eastern Star Research Fund (PI)

Title: Characterization of putative cancer genes

Role: Principal Investigator Time period: 2/95-1/96 Total costs: \$11,850

American Cancer Society, Ohio Division (PI)

Title: HLA putative helicase Ski2w

Role: Principal Investigator Time period: 11/96-10/97 Total costs: \$20,000

Central Ohio Diabetes Association (PI)

Title: Molecular genetic analysis of human MHC class III genes in Type 1 diabetes

Role: Principal Investigator Time period: 4/1/99-3/31/00

Total costs: \$35,000

7. PEER-REVIEW ACTIVITIES

A. GRANT REVIEWER

National Institutes of Health

- 1. Special Emphasis Review Panel, R24 Resource Grant, National Cancer Institute, July 1999
- 2. Resource Program Grant, National Center for Research Resources, June 2000
- 3. Special Emphasis Review Panel, P50 Program Grant SCOR on SLE, National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), April 2002
- 4. AMS Study Section, NIAMS, November 2003
- 5. High Risk Rheumatic and Musculoskeletal and Skin Diseases Research, RFA-AR-04-002, NIAMS, June 2004
- 6. Innate Immunity, RFA-AR-04-003, NIAMS, June 2004
- 7. P30 Rheumatic Disease Center Core Grants, NIAMS, ZAR1 EHB-D 01, February 2006
- 7. Special Emphasis Review Panel, P01 Program Grant, NIAID, ZAI KS-I (M1), April 2006
- 8. Special Emphasis Review Panel, 2009/05 ZRG1 IMM-C (02) M: Complement, Vaccines, and Host Defense (02/2009)
- 9. Stage 1 reviewer, RFA09-003 Challenge Grants 2009/10 ZRG1 IDM-C (58) R, and 2009/10 ZRG1 IMM-E (58) R (6/2009).
- 10. Hypersensitivity, Autoimmune and Immune-Mediated Diseases (HAI) Study Section (02/2010).
- 11. Stage 1 Reviewer, DP3 Type 1 Diabetes Impact Award, NIDDK (06/2011).
- 12. 2012/01 ZRG1 IMM-N (03) M, Member Conflict Special Emphasis Panel: Immune Mechanism (11/2011).

National and International Grant Agencies

- 1. Utah State University Biotechnology Center, Interdisciplinary Grant (1999)
- 2. Healy Postdoctoral Fellowship, University of Western Australia (2001)
- 3. The Wellcome Trust, Research Training Fellowship, U.K. (2002; 2007; 2008, 2009)
- 4. National Medical Research Council, Singapore, NMRC, Research Grants, (Winter, 2003; Summer 2003; Winter, 2007; Winter, 2009, Summer, 2009; Winter, 2011)
- 5. NHMRC Howard Florey Centenary Fellowship, Australia (2006)
- 6. Lupus Foundation of America pilot grant (2008)
- 7. Korean Research Foundation, Research Grant, Korea (2008)
- 8. Alliance for Lupus Research, US, Study Section 1 (2009)
- 9. Arthritis Research Council, UK, arc Clinician Scientist Fellowship (2/2010)
- 10. South Africa Medical Research Council, Self-Initiated Research Proposal (10/2010)

Local Grant Agencies

- 1. Columbus Children's Hospital Research Foundation Institutional Grants
- 2. OSU Department of Surgery Seed Grant (1997)
- 3. OSU College of Medicine Seed Grant (1998)
- 4. Nationwide Children's Hospital Ohio State University College of Medicine pilot grants (2008)

B. PROMOTION AND TENURE REVIEWER

- 1. External Reviewer, promotion to associate professor, Department of Biochemistry, Hong Kong University of Science and Technology, Hong Kong (2000-1)
- 2. External Reviewer, candidate for the Headship of the Department of Biology, Hong Kong University of Science and Technology, Hong Kong (2006-7).
- 3. External Reviewer, promotion to association professor, Department of Biology, Miami University, Ohio USA (2007).
- 4. External Reviewer, promotion to professor in residence, University of California, Los Angeles, CA, USA (2007).
- External Reviewer, promotion to associate professor, Case Western Reserve University College of Medicine, Cleveland, OH, USA (9/2010)

C. JOURNAL EDITORIAL BOARD

- 1. Co-editor, Complement Section, Experimental and Clinical Immunogenetics (1997-2002)
- 2. Managing Editor, a special issue for *Frontiers in Bioscience* (1999)
- 3. Advisory Editorial Board, *Trends in Immunology* (2002-2007)
- 6. Editorial Board, APLAR Journal of Rheumatology (2005-)
- 7. Editorial Board Member, the *Open Journal in Immunology* (2007-)

D. JOURNAL MANUSCRIPT REVIEWER

Acta Paediatrica (6/2007)

American Journal of Human Genetics (1997)

Annals of the Rheumatic Diseases (11/2006)

APLAR Journal of Rheumatology (4/2005)

Arthritis and Rheumatism (3/2005; 12/2009)

BioTechniques (12/1999)

BMC Genetics (8/2006)

BMC Medical Genetics (8/2007)

Cell Biochemistry & Function (02/2009)

Clinical and Experimental Immunology (11/2008)

Experimental and Clinical Immunogenetics (12/1997)

Expert Review in Clinical Immunology (4/2008)

Expert Review in Future Virology (8/2010)

Genes and Immunity (12/2003)

Genome (11/2004)

Genome Biology (12/2002)

Genome Research (3/1999)

Human Immunology (3/2003; 7/2004)

Human Molecular Genetics (5/2002)

Immunogenetics (6/2004; 2/2007; 11/2009)

Journal of Immunology (11/1997; 11/1998; 9/1999; 2/2000; 12/2001; 10/2004)

ISRN Rheumatology (4/2011)

Journal of Rheumatology (4/2011)

International Journal Immunogenetics (12/2010; 4/2011, twice)

Journal of Immunological Methods (7/2003)

Journal of Molecular Evolution (12/1999)

Journal of Leukocyte Biology (2/2003)

Kidney International (7/2007)

Life Sciences (7/2010, 12/2010)

Lupus, an International Journal (12/2010)

Mammalian Genome

Molecular and Chemical Pathology (1/1998)

Molecular Biology and Evolution (3/1999; 7/1999)

Molecular Genetics and Metabolism (2/2004)

Open Journal of Immunology (12/2008)

PLoS Genetics (7/2007)

Scandinavian Journal of Immunology (3/1998)

Scandinavian Journal of Rheumatology (2/2005)

Trends in Genetics (12/1999)

Trends in Immunology (3/2006; 9/2008)

8. TRAINEES AND TEACHING ACTIVITIES

G. MENTORSHIP

Ph.D. Students

- 1. Liming Shen, PhD (1991-94), OSU Biochemistry Program (OSBP); postdoctoral fellow at Harvard University; research scientist with the Food and Drug Administration, Washington, DC; currently Staff Scientist in Taiwan.
- 2. Bradley J. Baker, Ph.D. (1992-98), OSBP; CHI Research Forum (Basic Science) Awards, first place, (1994, 95) currently postdoctoral fellow at Yale University.
- 3. Zhenyu Yang, Ph.D. (1995-99) Molecular, Cellular and Developmental Biology Program (MCDB); OSU Presidential Fellow (1998-99); ASBMB travel award (1999); CHI Research Forum (Basic Science) Award, 2nd place (1999); postdoctoral fellow with the *Novartis*, NJ; staff scientist at biotechnology company PPI Discovery, San Francisco, CA; *Currently Attorney-at-Law, Intellectual Properties, Wilmer Cutler Pickering Hale and Dorr, Washington, DC.*
- 4. Kristi L. Rupert, Ph.D. (1995-99) Ohio State Biochemistry Program. CHI Research Forum (Basic Science) Award, 3rd place (1999). *Currently an Attorney-at-Law in Intellectual Properties in Washington DC (Intellectual properties)*
- 5. Erwin Chung, Ph.D. (1999-2003) Molecular Virology, Immunology and Medical Genetics, OSU; Recipient, Second Place Award, CHI Annual Research Forum (Basic Science) 2001; NIH-Lupus Foundation Travel Award, 2002. Postdoctoral Fellow at Fred Hutchison Research Institute, Seattle, Washington. Currently businessman in Sino-American Trade.
- 6. Yan Yang, Ph.D., MD (1999-2004) Molecular Virology, Immunology and Medical Genetics, OSU; Recipient, First Place Award, CHI Annual Research Forum (Basic Science) 2002; NIH-Lupus Foundation Travel Award, 2002. Medical Resident at University of Illinois, Urbana-Champaign; Nephrology Fellowship, University of Michigan (2010-).
- 7. Yee Ling Wu, Ph.D., Integrated Biomedical Graduate Program, OSU (2004-2009) Columbus Research Institute Annual Symposium Best Abstract Award, 2006; Research Institute at Nationwide Children's Hospital Symposium Best Poser (Graduate Student) Presentation Award 2008; Travel Award, Genomic Disorders, Hinxton, Cambridge, U.K.; Invited Speaker, Lupus Genetics Meeting at OMRF, 2008. Invited speaker, qPCR, Cambridge Healthtech Institute, Providence, 2008. Awarded NIH F31 Fellowship for postdoctoral training at MRC Laboratory of Molecular Biology, Cambridge, U.K. (from 11/2011)
- 8. Kathryn Kitzmiller, Ph.D. Integrated Biomedical Graduate Program, OSU (2005-2009)
 Best Presentation Award, Research Forum of the Research Institute, Nationwide Children's Hospital,
 Columbus, Ohio. Scientific Writer/Public Relations Representative, Chemical Abstracts/American
 Chemical Society, Columbus Ohio.

Postdoctoral Research Fellows / Research Scientists

- 1. Andrew W. Dangel, PhD (1990-96) currently Research Scientist, College of Biological Science, The Ohio State University.
- 2. Liming Shen, PhD (1994-95); currently Staff Scientist in Taiwan.
- 3. Natalie Jacobsen, Ph.D. (2002-3) Postdoctoral Research Scientist; currently Research Scientist, Centre for Molecular Immunology and Instrumentation, University of Western Australia, Nedlands, Perth, Western Australia
- 5. Yan Yang, Ph.D., MD (7/2004 6/2007) Medical resident, University of Illinois, Urbana-Champaign; currently Nephrology Fellowship, University of Michigan
- 6. Karine Mayilyan, Ph.D. (3-4/2005; 11/2006 2/2007; 7-8/2009) Fulbright International Fellow; cosponsored with Dr. Robert Weinberger, National Institute of Mental Health, NIH.
- 7. Yee Ling Wu, Ph.D. (2/2009 11/2010); NIH F32 Fellowship for postdoctoral training (with Dr. Michael Neuberger, FRS) at the MRC Laboratory of Molecular Biology, Cambridge, UK

Clinical Research Fellows

- Carol A. Blanchong, M.D. (1997- 2000). Pediatric Hematology Clinical Research Fellow. Copy number variations of Complement C4A and C4B. CHI Clinical Research Forum Award, 4th place (1998), 2nd place (1999). Clinical Assistant Professor, Division of Hematology/Oncology, Nationwide Children's Hospital, Columbus Ohio; Department of Pediatrics, The Ohio State University, OH
- Kapil Saxena, M.D. (2002-2004) Pediatric Hematology Clinical Research Fellow. Complement C4 Gene CNVs in Asian Indians.
 Clinical Assistant Professor and Director of Hemophilia Program, University of Oklahoma, OK (2004-2008): Assistant Professor, Boston Children's Hospital and Harvard University, Boston, MA (2009 -)
- Stephanie Savelli, MD (2004-2006) Pediatric Hematology Clinical Research Fellow; Complement in immune thrombocytopenia and antiphospholipid syndrome.
 Currently Clinical Assistant Professor, University of Akron, OH
- 4. Suzanne Kingery, MD (2008-2011) Pediatric Endocrinology Fellow (earned Oral Presentation Award at the Midwest Endocrinology Society, 2010). Complement in new-onset type 1 diabetes. Currently Clinical Assistant Professor at University of Louisville, KY.
- 5. Anjali Patwardhan, MD, (2011-2012) Pediatric Rheumatology Fellow. Copy number variation of immune effector genes in juvenile dermatomyositis

MS Graduates

- Salih Sanglioglu, Ph.D., MS; MCDB, 1993
 Partial gene duplication
 Currently Director of The Human Gene Therapy Unit, Akdeniz University Hospitals and Clinics, Antalya, Turkey).
- 2. Shanxiang Zhang, MS, 1998; Medical Microbiology and Immunology; Ph.D. Biochemistry of recombinant protein for human Ski2w
- Charles M. Daniel MD, MS, OSBP
 Studies of human thymocyte differentiation antigens CD1
 Currently Clinical Assistant Professor, Department of Internal Medicine, OSU.
- Xiaodong Qu, MS 1999; MCDB, OSU Cell biology of human Ski2w Currently entrepreneur on Sino-American trade.
- 5. Andrea Rutherford, MCDB, OSU (2011- present)
 Genetics of human pancreatic and salivary amylase gene copy number variations

Research Mentor for Undergraduates, Medical Students and Professional Students

- Audra Parker (1994-99) Columbus School for Girls, Student Research Honors Program;
 MIT undergraduate student (summer research mentor)
 MD graduate at the Ohio State University
- 2. Christopher M. Bailey, B.S. (2000-02) Honors Program, Otterbein College, Ohio Ph.D. graduate at Yale University
- 3. Nora Atghothani (2002-04) OSU Minority Scholar, Honors Program; MD graduate at the Ohio State University
- Nazreen Esack (2006) OSU Honors Student, Department of Molecular Genetics; Doctor of Optometry, College of Optometry, OSU Currently a practitioner in Optometry, New Jersey.
- 5. James Godfrey (summer, 2009) OSU Medical Student; Roessler Scholar.
- 6. Alaaedin Alhomosh, MD (5/2010-5/2011) HLA class II genotyping in health and diseases. Currently medical intern/resident Texas Tech University

B. PhD Advisory Committees

Ph.D. General Examination (G) and Dissertation (D) Examination at OSU (unless specified)

- 1. Alissa V. Winnard, Ph.D. (1993), OSBP (Dissertation) (advisor: A. Burghes, Ph.D.)
- 2. Yunfu Hu, Ph.D. (1991-94) Department of Veterinary Physiology and Pharmacology (advisor: Y.C. Lin, Ph.D., DVM)
- 3. Liang Liu, Ph.D., M.D. (1990-96) Department of Pathology (advisor: R. Barth, MD)
- 4. Frossso Voulgaropoulou, Ph.D. (1990-96) MCDB (advisor: P.R. Johnson, MD)
- 5. Chi-ho Mak, Ph.D. (1991-96) OSBP (advisor: L.C. Wu, D.Phil.)
- 6. Eunjoo Hwang Lee, Ph.D. (1993-97) MCDB (advisor: Y. Richihisa, Ph.D.)
- 7. Harlit Canahan, Ph.D. (1993-97) MCDB (advisor: Y.C. Lin, Ph.D., DVM)
- 8. Carl Allen, MD, Ph.D. (1997-98) Medical Scientist Program (G) (advisor: L.C. Wu, D.Phil.)
- 9. Jacqueline M. Crisman, Ph.D. (1992-97) MCDB (advisor: P. Kalakukady)
- 10. Ping Guan, Ph.D. (1992-98) Department of Molecular Genetics (advisor: A. Burghes, Ph.D.)
- 11. Ying Tao (1995-00) MCDB (advisor: G. Marzaluf, Ph.D.)
- 12. Fawzi Irshaid, Ph.D. (2002 -05) MCDB (advisor: D.J. Birmingham, Ph.D.)
- 13. Bin Li (2004-06) Department of Veterinary Biosciences (advisor: J. DeVille, Ph.D.)
- 14. Ding Chen (2006 2008) IBGP (advisor: Yang Liu, Ph.D)
- 15. Ronny Matta (2004 2009) Integrated Biomedical Science Graduate Program (advisor: Yusen Liu, Ph.D.)

Graduate School Representative for Ph.D. General (G) or Dissertation Examination (D)

- 1. Sabine Francke, D.V.M., Ph.D. (1996) Veterinary Pathobiology Graduate Program (D)
- 2. Wiwat Chaichanasiriwithaya, D.V.M., Ph.D. (1998) Veterinary Pathobiology Graduate Program (D)
- 3. Dmitriy A. Bondor (2001) Department of Chemistry (G)
- 4. Xiaokui Mao, Ph.D. (2002) OSBP (D)
- 5. Terrance Michael Hubbard (2003) Department of Education-Teaching and Learning (G)
- 6. Matthew Allan Buccellato (2004) Veterinary Biosciences (G)
- 7. Chatchawan Jantasuriyarat (2006) Plant Pathology (D)
- 8. Lina Juswara (2010) Evolution Ecology & Organismal Biology (D)
- 9. John Reed Bruzzese (06/10/2011) Mechanical Engineering (D)

Overseas Ph.D. Dissertation Examiner

- University of Western Australia, Perth, Western Australia (1999)
 Name of Candidate: Sonia Cattley
- 2. University of Helsinki and Finnish Red Cross Blood Transfusion Service, Finland (2002) Name of Candidate: Taina Jaatinen
- 3. University of Western Australia, Perth, Western Australia (2003) Name of Candidate: Olga Patricia Martinez, MB
- 4. University of Western Australia, Perth, Western Australia (2004) Name of Candidate: Jenny Hui

Committees of MS Thesis Examination at OSU

- 1. Ying Tao, M.S. (1995) MCDB (advisor: L.S. Chang)
- 2. Jun Zheng, M.S. (1996) MCDB (advisor: Y.C. Lin)

C. DIDACTIC TEACHING

Graduate course MVIMG701 / MICRO701, Molecular and Cellular Immunology, OSU Two lectures on the complement system in the fall quarter annually, since 1992.

Facilitator, Problem-Based Learning Pathway, OSU Spring quarter, 1997; letter of appreciation

Graduate course MVIMG 801, Immunogenetics and Autoimmune Diseases, OSU Course Coordinator: 2002, 2004, 2006

Demonstrator, Laboratory course in Genetics; Demonstrator, Laboratory course in Molecular Biology, The Chinese University of Hong Kong, 1981-83.

D. Invited Seminars / Lectures

- 5/98 VIIth Complement Genetics Workshop and Conference, Mainz, Germany Plenary Lecturer: Genetics and evolution on the MHC-linked complement gene cluster: from C2 to TNX
- 7/99 Centre for Molecular Immunology and Instrumentation Retreat, Perth, Western Australia (Host: Roger L. Dawkins): C4, HERV-K(C4) and primate evolution
- 2/00 OSU Immunology Seminar (Host: Rolf Barth): The Human and Mouse MHC class III region
- 4/00 CMII-IRF Retreat, Perth, Western Australia (Host: Roger L.Dawkins): Complement and CCP; Guest Lecturer for UWA Course in Molecular Evolution and Genomics: Gene Duplication; CMII and the University of Western Australia Honorary Speaker for the Opening Ceremony of the CMII Annexes: International Collaboration
- 2/01 Guest Lecturer, Immunology 305, Otterbein College, Columbus, Ohio: Type 1 diabetes
- 8/01 Grand Rounds presentation, Department of Internal Medicine, The Ohio State University:
 The Human Genome and Autoimmune Disease-SLE (with four other OSU faculty members)
- 9/01 Visiting Professor, Department of Pediatrics, Semmelweis Mediacl University and Hungarian Academy of Sciences, Budapest, Hungary (Hosts: Prof. Dr. George Fekete and Professor George Fust); public lecture: Diversity of Human complement C4A and C4B.
- 10/01 Visiting Professor, Department of Pathology, University of Western Australia and Centre of Molecular Immunology and Instrumentation (Host: Roger L. Dawkins), Perth, Australia. Public Seminars: (1) The Human Genome Project-International collaborations; (2) Polymorphism of human complement component C4
- 3/02 OSU Immunology Seminar: Complement C4 in human systemic lupus erythematosus
- 2/03 Department of Medicine, The University of Hong Kong (Host: Professor CS Lau): Sophisticated genetic diversity of human complement component C4 and the RCCX modules in health and in disease
- 5/03 OSU IBGP Distinguish Speaker Lecture: Variations in intrinsic strengths of human complement in immunity and diseases
- 5/03 Columbus Children's Research Institute Annual Research Conference: "Variations of complement in health and disease"
- 6/04 Grand Rounds Lecture: Variations of Complement in Immunity and Diseases.

 Division of Rheumatology, Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan (Host: Professor David Fox, MD)
- 10/04 Invited Speaker, 1st International Conference on Basic and Clinical Immunogenomics, Budapest, Hungary (3-7 October, 2004)
- 3/05 Invited Speaker, PENTA semi-annual meeting for Midwest Pediatric Rheumatologists, Title: Complement components C4A and C4B in health and systemic lupus erythematosus.
- 10/06 Invited Speaker, 2nd International Conference on Basic and Clinical Immunogenomics, Budapest, Hungary (October, 2006)
- 1/08 OSU Immunology Seminar: Copy number variation of immune effector genes in autoimmune diseases.
- 2/08 OSU Medical Center Comprehensive Transplant Center Conference: Contrasting roles of complement in human systemic lupus erythematosus and antiphospholipid syndrome.

- 3/08 Invited speaker: Genomic Disorders a Wellcome Trust sponsored international conference at Hinxton, Cambridge, England (Organized by Jim Lupski). Gene copy number variation of complement C4 in systemic lupus erythematosus: low copy number is a risk factor for and high copy number is a protective factor against human SLE.
- 7/08 Invited speaker: MRC Immunochemistry Unit meeting, Saint Ann College, Oxford: Complement C4 in SLE and APS (organized by Ken Reid and Bob Sim).
- 9/08 Invited Speaker: Second Annual Symposium on Systemic Lupus Erythematosus, Harvard Institute of Medicine, Boston: Complement in SLE and antiphospholipid syndrome (organized by George Tsokos).
- 3/09 Invited Speaker, Meeting on Comprehending Copy Number Variation: tools, applications and results, Cambridge Healthtech Institute, San Diego, CA: Great Diversities in Genotypes and Phenotypes Associated with High Frequency CNVs in Human Populations.
- 02/10 Invited Speaker, Grand Rounds Presentation at Department of Internal Medicine, The Ohio State University. Title: Copy Number Variation in Health and Diseases (Host: Dr. Brad H. Rovin).
- 05/11 Invited Speaker, Biology Program, The Chinese University of Hong Kong. Title: Copy Number Variations in Health and Diseases (Host: Prof. Norman Woo).
- 11/11 Moderator of Opening Ceremony, 2nd World Congress in Immunodiseases and Therapy, Guangzhou, China; Invited Speaker and Chair of Section entitled "Multi-dimensional Biosciences Meet Classical Immunology". Presentation Title: Copy Number Variations of Immune Effector Genes in Systemic Lupus Erythematosus and Healthy Subjects.

E. HOST TO VISITING SCHOLARS

(National or international scientists who visited our laboratory)

- 1. Allison Bybee, Ph.D., University College, University of London, England (Summer, 2001)
- 2. Csaba Salai, Ph.D., Hungarian Academy of Sciences (April, 2002)
- 3. Cindy Marschner, Complement Laboratory, National Jewish Hospital, Colorado (August, 2002)
- 4. Joanne Streib, National Jewish Hospital, Colorado (August, 2002)
- 5.. Bernadett Blaskó, Ph.D., Semmelweis University, Budapest, Hungary (April, 2005)
- 6. Amy Marrs, National Jewish Hospital, Colorado (October, 2007)
- 7. Emeli Lundstrom, MS, PhD student, Rheumatology Unit, Karolinska Institute, Solna, Sweden (Oct-Nov, 2007).
- 8. Paul Reynolds, PhD. Associate Professor, University of Colorado, Denver (9/2009)

F. HOST TO VISITING PROFESSORS OR SEMINAR SPEAKERS

- 1. Professor Michael C. Carroll, Ph.D., Harvard University Medical School, Boston (1991)
- 2. Professor John E. Volanakis, M.D., University of Alabama at Birmingham (1992)
- 3. Dr. King-Lau Chow, Albert Einstein School of Medicine, New York (1992)
- 4. Professor Lap-Chee Tsui, Ph.D., Hospital for Sick Children, University of Toronto (1993)
- 5. Dr. David Kaplan, MD, PhD, Case Western Reserve University (1993)
- 6. Professor Harvey R. Colten, M.D., Washington University, St Louis (1994)
- 7. Professor David Chaplin, M.D., Ph.D. Washington University, St Louis (1994)
- 8. Dr. Steven Porcelli, M.D. Harvard University Medical School (1995)
- 9. Dr. Roberto Poljak, Ph.D., University of Maryland (1995)
- 10. Dr. Reed Wickner, M.D., NIH (1995)
- 11. Professor Thomas R. Welch, M.D., Cincinnati Children's Hospital (1996)
- 12. Dr. Joann M. Moulds, Ph.D., University of Texas Medical School, Houston (1998)
- 13. Dr. Maisa Lokki, Ph.D. Finnish Red Cross Blood Transfusion Service, Helsinki (1999)
- 14. Professor John P. Atkinson, M.D., Washington University, St Louis (2000)
- 15. Dr. Ann Marie Schmidt, M.D., Columbia University, New York (2000)
- 16. Professor Betty P. Tsao, Ph.D., UCLA (2001)
- 17. Dr. George Tsokos, M.D., Uniformed Services University of Health Sciences, Bethesda (2002)
- 18. Professor John D. Reveille, M.D., University of Texas School of Medicine (2/2004)
- 19. Professor Moncef Zouali, M.D., INSERM, University of Paris (3/2004)
- 20. Professor Ed Medof, M.D., Case Western Reserve University (4/2004)
- 21. Professor Georges Hauptmann, MD, Ph.D., University of Strasbourg, France (5/2005)
- 22. Professor George Fust, M.D., D.Sc., Semmelweis University, Budapest, Hungary (6/2005)
- 23. Dr. Robert Roubey, MD, University of North Carolina, Chapel Hill (3/2006)
- 24. Dr. Andrea Sestak, MD, PhD. Research Assistant Professor, OMRF, Oklahoma (3/2007)
- 25. Dr. Gary S. Gilkeson, MD, Professor and Vice-Chair, Department of Medicine, Medical University at South Carolina (4/2008)
- 26. Dr. James Lupski, MD, PhD, Vice Chairman, Department of Molecular and Human Genetics; Cullen Professor of Molecular and Human Genetics, Professor of Pediatrics, Baylor College of Medicine; Grand Rounds resentation and Research Seminar (2/2010).
- 27. Dr. Feng Lin, PhD, Assistant Professor, Case Western Reserve University; Immunology Seminar, OSU (10/19/2010)

9. FULL-LENGTH PUBLICATIONS (Total: 94)

A. PEER-REVIEWED / ORIGINAL RESEARCH ARTICLES

- 1. Belt, K.T., **Yu, C.Y.**, Carroll, M.C., and Porter, R.R. (1985) Polymorphism of human complement component C4. *Immunogenetics* 21:173-180. (Impact factor: 2.852; Number of cites in ISI: *116*)
- 2. **Yu, C.Y.** and Mark, K.K. (1985) Expression of the T4 early genes 62, 44, 45 and 46 in the λ -T4 recombinant phage λ 806-17. *J. Gen. Virol.* 66:1215-1219. (Impact factor: 3.036)
- 3. **Yu, C.Y.**, Belt, K.T., Giles, C.M., Campbell, R.D., and Porter, R.R. (1986) Structural basis of the polymorphism of human complement component C4A and C4B: gene size, reactivity and antigenicity. *EMBO J.* 5:2873-2881. (Impact factor: 10.086; Number of cites in ISI: *154*)
- 4. **Yu, C.Y.** and Campbell, R.D. (1987) Definitive RFLPs to distinguish between the human complement C4A/C4B isotypes and the major Rodgers/Chido determinants: Application to the study of C4 null alleles. *Immunogenetics* 25:384-390. (Impact factor: 2.852; Number of cites in ISI: 89)
- 5. **Yu, C.Y.** and Campbell, R.D. (1987) *Sau* 3Al polymorphism of human complement C4 at the C4d region. *Biochem. Soc. Trans.* 5:654-655. (Impact factor: 2.579; Number of cites in ISI: 3)
- 6. Rodrigues, N., Dunham, I., **Yu, C.Y.**, Carroll, M.C., Porter, R.R. and Campbell, R.D. (1987) Structure of the HLA-linked steroid 21-hydroxylase Genes. *Biochem. Soc. Trans.* 5:656-657. (Impact factor: 2.579; Number of cites in ISI: *5*)
- 7. Rodrigues, N.R., Dunham, I., **Yu, C.Y.**, Carroll, M.C., Porter, R.R., and Campbell R.D. (1987) Molecular characterization of the HLA-linked steroid 21-hydroxylase B gene from an individual with congenital adrenal hyperplasia. *EMBO J.* 6:1653-1661. (Impact factor: 10.086; Number of cites in ISI: *146*)
- 8. **Yu, C.Y.**, Campbell, R.D., and Porter, R.R. (1988) A structural model for the location of the Rodgers and the Chido antigenic determinants and their correlation with the human complement C4A/C4B isotypes. *Immunogenetics* 27:399-405. (Impact factor: 2.852; Number of cites in ISI: *52*)
- 9. Calabi, F., Belt, K.T., **Yu, C.Y.**, Bradbury, A., Mandy W.J., and Milstein, C. (1989) The rabbit CD1 and the evolutionary conservation of the CD1 gene family. *Immunogenetics* 30:370-377. (Impact factor: 2.852; Number of cites in ISI: *52*)
- Yu, C.Y. and Milstein, C. (1989) A physical map linking the five CD1 human thymocyte differentiation antigen genes. *EMBO J.* 8:3727-3732. (Impact factor: 10.086; Number of cites in ISI: 61)
- 11. McLean, R.H., Giles, C.M., **Yu, C.Y.**, Campbell, R.D., and Bias, W.B. (1990) Reversed restriction sites for the C4 isotype and Rodgers (1)/Chido (1) regions on two unique C4 genes. *Tissue Antigens* 35:75-81. (Impact factor: 2.462; Number of cites in ISI: 7)

- 12. **Yu, C.Y.** (1991) The complete exon-intron structure of a human complement component C4A gene: DNA sequences, polymorphism, and linkage to the 21-hydroxylase genes. *J. Immunol.* 146:1057-1066.
 - (Impact factor: 6.293; Number of cites in ISI: 94)
- 13. Shen, L.M., Wu, L.C., Sanlioglu, S., Chen, R., Mendoza, A.R., Dangel, A., Carroll, M.C., Zipf, W. and Yu, C.Y. (1994) Structure and genetics of the partially duplicated gene RP located immediately upstream of the complement C4A and the C4B genes in the HLA class III region: molecular cloning, exon-intron structure, composite retroposon, and breakpoint of gene duplication. *J. Biol. Chem.* 269: 8466-8476.
 - (Impact factor: 5.808; Number of cites in ISI: 112)
- 14. Dangel, A., Mendoza, A., Baker, B.J., Menachery, C., Carroll, M.C., Wu, L.C. and Yu, C.Y. (1994) The dichotomous size variation of human complement C4 gene is mediated by a novel family of endogenous retrovirus which also establishes species-specific genomic patterns among Old World primates. *Immunogenetics* 40:425-436. (Impact factor: 2.852; Number of cites in ISI: 87)
- Lin, Y.C., Canatan, H., Chang, C.J.G., Hu, Y.F., Chen, R. Yu, C.Y., Bruggemeiger, R.W. and Sumers, W.J. (1994) Detection of kerationocyte growth factor (KGF) transcripts from normal human and archival canine benign prostic hyperplastic tissues. *J. Med.* 25: 41-64. (Number of cites in ISI: 14)
- 16. Dangel, A.W., Baker, B.J., Mendoza, A.R. and Yu, C.Y. (1995) Complement component C4 gene intron 9 as a phylogenetic marker for primates: Long terminal repeats of the endogenous retrovirus ERV-K(C4) is a molecular clock of evolution. *Immunogenetics* 42: 41-52. (Impact factor: 2.852; Number of cites in ISI: 50)
- 17. Dangel, A.W., Shen, L., Mendoza, A.R., Wu, L.C. and **Yu, C.Y.** (1995) Human helicase gene SKI2W in the HLA class III region exhibits striking similarities to the yeast antiviral gene SKI2 and to the human gene KIAA0052: emergence of a new gene family. *Nucleic Acids Res.* 23:2120-2126. (Impact factor: 6.317; Number of cites in ISI: 39)
- 18. Wu, L.-C., Liu, Y., Strandtmann, J., Mak, C.-H., Lee, B., Li, Z. and **Yu, C.Y.** (1996) The mouse DNA binding protein Rc for the kappa B motif of transcription and for the V(D)J recombination signal sequences contains composite DN-protein interaction domains and belongs to a new family of large transcriptional proteins. *Genomics* 35:415-424. (Impact factor: 3.558; Number of cites in ISI: 17)
- 19. Mott, J., Richihisa, Y., Zhang, Y., Reed S. and **Yu, C.Y.** (1997) Comparison of PCR and culture to the indirect fluorescent-antibody test for diagnosis of potomac horse fever. *J. Clin. Microbiol.* 35:2215-2219. (Impact factor: 3.445; Number of cites in ISI: *18*)
- Qu, X.D., Yang, Z., Zhang, S., Shen, L., Dangel, A.W., Redman, K.L., Hughes, J.H., Wu, L.C. and Yu, C.Y. (1998) The human HLA DEVH-box protein Ski2w is associated with polysomes and ribosomes. *Nucleic Acids Res.* 26: 4068-4077.
 (Impact factor: 6.317; Number of cites in ISI: 25)
- 21. Yang, Z., Shen, L., Dangel, A.W., Wu, L.C. and **Yu, C.Y.** (1998) Four ubiquitously expressed genes, *RD-SKI2W-DOM3Z-RP1*, are present between complement component genes factor *B* and *C4* in the class III region of the HLA. *Genomics* 53: 338-347. (Impact factor: 3.558; Number of cites in ISI: 20)

22. Lokki, M.-L., Circolo, A., Ahokas, P., Rupert, K.L., **Yu, C.Y.**, Colten, H.R. (1999) Deficiency of complement protein C4 due to identical frameshift mutations in the *C4A* and *C4B* genes. *J. Immunol.*162: 3687-3693.

(Impact factor: 6.293; Number of cites in ISI: 24)

23. Bachmeyrer, C., Mak, C,-H., **Yu, C.Y.** and Wu, L.C. (1999) Regulation of phosphorylation of the zinc finger protein KRC that binds the κB motif and V(D)J recombination signal sequences. *Nucleic Acids Res.* 27: 643-648.

(Impact factor: 6.317; Number of cites in ISI: 17)

- 24. Yang, Z., Mendoza, A.R., Welch, T.R., Zipf, W.B., and **Yu, C.Y.** (1999) Modular variations of HLA class III genes for serine/threonine kinase RP, complement component C4, steroid 21-hydroxylase CYP21 and tenascin TNX (the RCCX Modules): a mechanism for gene deletions and disease associations. *J. Biol.Chem.* 274: 12147-12156. (Impact factor: 5.808; Number of cites in ISI: *85*)
- 25. Rupert, K.L., Rennebohm, R.M. and **Yu, C.Y.** (1999) An unequal crossover between the RCCX modules of the HLA leading to the presence of a *CYP21B* gene and a tenascin *TNXB/TNXA-RP2* recombinant between *C4A* and *C4B* genes in a patient with juvenile rheumatoid arthritis. *Exp. Clin. Immunogenet.* 16:81-97. (Impact factor: 1.741; Number of cites in ISI: 20)
- 26. Yang, Z. and **Yu, C.Y.** (2000) Organizations and gene duplications of the human and mouse MHC complement gene clusters. *Exp. Clin. Immunogenet.* 17:1-17 (Impact factor: 1.741; Number of cites in ISI: 25; with journal cover illustration)
- 27. Blanchong, C.A., Zhou, B., Rupert, K.L., Chung, E.K., Jones, K.N., Sotos, J.F., Zipf, W.B., Rennebohm, R.M., and **Yu, C.Y.** (2000) Deficiencies of human complement component C4A and C4B and heterozygosity in length variants of *RP-C4-CYP21-TNX* (RCCX) modules in Caucasians: the load of RCCX genetic diversity on MHC-associated disease. *J. Exp. Med.* 191: 2183-2196. (Impact factor: 14.484; Number of cites in ISI: 78)
- 28. Rupert, K.L., Moulds, J.M Yang, Y., Arnett, F.C, Warren, R.W, Reveille, J.D., Myones, B.L., Blanchong, C.A. and **Yu C.Y.** (2002) The molecular basis of complete complement C4A and C4B deficiencies in a systemic lupus erythematosus (SLE) patient with homozygous *C4A* and *C4B* mutant genes. *J. Immunol.* 169: 1570-1578. (Impact factor: 6.293; Number of cites in ISI: 23)
- 29. Chung, E.K., Yang, Y., Rupert, K.L., Jones, K.N., Rennebohm, R.M., Blanchong, C.A and **Yu, C.Y.** (2002) Determining the 1, 2, 3 or 4 long and short loci of human complement *C4* in a major histocompatibility complex haplotype coding for C4A or C4B proteins. *Am. J. Hum. Genet.* 71:810-822.

(Impact factor: 12.629; Number of cites in ISI: 23)

30. Chung, E.K., Yang, Y., Rennebohm, R.M., Lokki, M., Higgins, G.C., Jones K., Zhou, B., Blanchong, C.A., and **Yu, C.Y.** (2002) Genetic sophistication of human complement C4A and C4B and *RP-C4-CYP21-TNX* modules in the major histocompatibility complex. *Am. J. Hum. Genet.*71:823-837. (Impact factor: 12.629; Number of cites in ISI: *36*)

- 31. Vatay, Ä., Yang, Y., Chung, E. K., Zhou, B., Blanchong, C. A., Kovacs, M., Karadi, I., Fust, G., Romics, L., **Yu, C. Y.**, and Szalai, C. (2003) Relationship between the complement components C4A and C4B diversities and two TNFA promoter polymorphisms in two healthy Caucasian populations. *Hum. Immunol.* 64:543-552. (Impact factor: 2.605; Number of cites in ISI: 10)
- 32. Yang, Y., Chung, E.K., Zhou, B., Blanchong, C.A., **Yu, C.Y.**, Kovács, M., Karádi, I., Fust, G. and Varga, L. (2003) Diversity in intrinsic strengths of the human complement system: Serum C4 protein concentrations correlate with *C4* gene size and polygenic variations, hemolytic activities and body mass indexes. *J. Immunol.* 171: 2734-2745. (Impact factor: 6.293; Number of cites in ISI: 29)
- 33. Logar, C.M., Chen,W., Schmitt, H., **Yu, C.Y.** and Birmingham, D.J. (2004) Human CR1-like expresses a transcript for a C4b binding protein. *Molec. Immunol.* 40: 831-840. (Impact factor: 4.768; Number of cites in ISI: 2)
- 34. Yang, Y., Lhotta, K., Chung, E.K., Eder, P., Neumair, F. and **Yu, C.Y.** (2004) Complete complement components C4A and C4B deficiencies in human systemic lupus erythematosus and kidney diseases. *J. Immunol.* 173:2803-2814. (Impact factor: 6.293; Number of cites in ISI: 25)
- 35. Füst, G., Arason, G.J., Kramer, J., Szalai, C., Duba, J., Yang, Y., Chung, E.K., Zhou, B., Blanchong, C.A., Lokki, M.-L., Bödvarsson, S., Prohászka, Z., Karádi, I., Vatay, Á., Kovács, M., Romics, L., Thorgeirsson, G., **Yu, C.Y**. (2004): Genetic basis of tobacco smoking: strong association of a specific major histocompatibility complex haplotype on chromosome 6 with smoking behavior. *Int. Immunol.* 16:1507-1514. (Impact factor: 4.015; Number of cites in ISI: 15)
- 36. Rovin, B.H., Song, H., Birmingham, D.J., Hebert, L.A., **Yu, C.Y.**, and Nagaraja, H.N. (2005) Urine chemokines as biomarkers of human SLE activity. *J. Am. Soc. Nephrol.* 16: 467-473. (Impact factor: 7.240; Number of cites in ISI: 65)
- 37. Rovin, B.H, Tang, Y., Sun, J., Nagaraja, H.N., Hackshaw, K.V., Gray, L., Rice, R., Birmingham, D.J., Yu, C.Y., Spetie D.N., Aziz, A., Hebert, L.A. (2005) Clinical significance of fever in the SLE patient receiving steroid therapy. *Kidney Int.* 68: 747-759. (Impact factor: 4.927; Number of cites in ISI: 10)
- 38. Rovin, B.H., Song H., Hebert, L.A., Nadasdy, T., Nadasdy, G., Birmingham, D.J., **Yu, C.Y.** and Nagaraja, H.N. (2005) Plasma, urine, and renal expression of adiponectin in human systemic lupus erythematosus. *Kidney Int.* 68:1825-1833. (Impact factor: 4.773; Number of cites in ISI: 36)
- 39. Wu, H., Cantor, R.M., Cunninghame Graham, D., Lingren, C.M., Farwell, L., de Jaeger, P., Bottini, N., Grossman, J., Hahn, B.H., Julkunen, H., Hebert, L.A., Rovin, B.H., Birmingham, D.J., Rioux, J., Yu, C.Y., Kere, J., Timothy J. Vyse, T.J., Tsao, B.P. (2005) Association analysis of the R620W polymorphism of protein tyrosine phosphatase PTPN22 in SLE families: Increased T alleles frequency in those with autoimmune thyroid disease. *Arthritis Rheum*. 52:2396-402 (Impact factor: 7.75; Number of cites in ISI: 33)

- 40. Birmingham, D.J., Gavit, K.F., McCarty, S.M., Tong, J., **Yu, C.Y.**, Rovin, B.H., Nagaraja, H.N., and Hebert, L.A. (2006) Consumption of erythrocyte complement receptor type one (CD35) is associated with protection against SLE renal flare. *Clin. Exp. Immunol.* 143: 274-80. (Impact factor: 2.747; Number of cites in ISI: 5)
- 41. Wu, Y.L., Higgins, G.C., Rennebohm,R.M., Chung, E.K., Yang, Y. Zhou, B. Nagaraja, H.N., Birmingham, D.J., Rovin, B.H., Hebert, L.A. and **Yu, C.Y.** (2006) Three distinct profiles of serum complement C4 proteins in pediatric systemic lupus erythematosus (SLE) patients: Tight associations of complement C4 and C3 protein levels in SLE but not in healthy subjects. *Adv. Exp. Med. Biol.* 586:227-247.

PubMed ID: 16893076 (Impact factor: 0.646; Number of cites in ISI: 7)

- 42. Birmingham, D.J., Nagaraja, H.N., Rovin, B.H., Spetie, L., Zhao, Y., Li X., Hackshaw, K.V., **Yu, C.Y.**, Malarkey, W.B., Hebert, L.A (2006) Fluctuation in self-perceived stress and increased risk of flare in patients with lupus nephritis carrying the serotonin receptor 1A -1019 G allele. *Arthritis Rheum*. 54:3291-3299.
 - PubMed ID: 17009264 (Impact factor: 7.75; Number of cites in ISI: 4)
- 43. Laki, J., Kiszel, P., Vatay, A., Blasko, B., Kovacs, M., Korner, A., Madacsy, L., Blatniczky, L., Almassy, Z., Szalai, C., Rajczy, K., Pozsonyi, E., Karadi, I., Fazakas, A., Hosszufalusi, N., Panczel, P., Arason, G.J., Wu, Y.L., Zhou, B., Yang, Y., **Yu, C.Y.** and Fust, G. (2007) The HLA 8.1 ancestral haplotype is strongly linked to the C allele of -429T>C promoter polymorphism of receptor of the advanced glycation endproduct (RAGE) gene. Haplotype-independent association of the -429C allele with high hemoglobin(A1C) levels in diabetic patients. *Mol. Immunol* 44: 648-655. PubMed ID: 16504296 (Impact factor: 4.768; Number of cites in ISI: 11)
- 44. Wu, H., Boackle, S.A., Hanvivadhanaku, P., Ulgiati, D., Grossman, J.M., Lee, Y., Shen, N., Abraham, L.J., Mercer, T.R., Park, E., Hebert, L.A., Rovin, B.H., Birmingham, D.J., Chang, D., Chen, C.J., McCurdy, D., Badsha, H.M., Thong, B.Y.H., Chng, H.H., Arnett, F.C., Wallace, D..J, Yu. C.Y., Hahn, B.H., Cantor, R.M., Tsao, B.P. (2007) Association of a common complement receptor 2 haplotype with increased risk of SLE. *Proc. Natl. Acad. Sci. USA* 104:3961-3966. PubMed ID: 17360460 (Impact factor: 9.643; Number of cites in ISI: 14)
- 45. Wang, L., Lin, S., Rammohan, K.W., Liu Z., Liu, J.-Q., Liu, R.-H., Guinther, N., Lima, J., Shou, Q., Wang, T., Zheng, X., Birmingham, D.J., Rovin, B.H., Hebert, L.A., **Wu, Y.L.**, Lynn, D.J., Cooke G., Yu, C.Y., Zheng, P., Liu, Y. (2007) A di-nucleotide deletion in CD24 confers protection against autoimmune diseases. *PLoS Genet.* 3: e49, pp1-10. PubMed ID: 17411341 (Impact factor: 7.671, number of cites: 15)
- 46. Yang, Y., Chung, E.K., Wu, Y.L., Savelli, S., Nagaraja, H.N., Zhou, B., Hebert, M., Jones, K., Shu, Y., Kitzmiller, K., Blanchong, C.A., McBride, K., Higgins, G.C., Rennebohm, R.M., Rice, R.R., Hackshaw, K.V., Roubey, R.A., Grossman, J.M., Tsao, B.P., Birmingham, D.J., Rovin, B.H., Hebert, L.A. and Yu, C.Y. (2007) Gene copy-number variation and associated polymorphisms of complement component C4 in human systemic lupus erythematosus (SLE): Low copy-number is a risk factor for and high copy-number is a protective factor against European American SLE disease susceptibility. Am. J. Hum. Genet. 80:1037-1044.

PubMed ID: 17503323 (Impact factor: 12.629; Number of cites in ISI: 138)

- 47. Auer, H., Newsom, D.L., Nowak, N.J., McHugh, K.M., Singh S., **Yu, C.Y.**, Yang, Y. Wenger, G.D., Gastier-Foster, J.M. and Kornacker, K. (2007) Gene-resolution analysis of DNA copy number variation using oligonucleotide expression microarrays. *BMC Genomics* 8:111. Pubmed ID: 17470268 (Impact factor: 4.029; Number of cites in ISI: 8)
- 48. Birmingham, D.J., Irshaid, F., Gavit, K.F., Nagaraja, H.N., Yu, C.Y., Rovin, BH and Hebert, L.A. (2007) A polymorphism in the type one complement receptor (CR1) adds a cysteine in the C3b/C4b binding domain that inhibits ligand binding. *Mol. Immunol.* 44:3510-3516. PubMed ID: 17467802 (Impact factor: 4.768; Number of cite in ISI: 1)
- 49. Birmingham, D.J., Rovin, B.H., Shidham, G., Nagaraja, H.N., Zou, X., Bissell, M., **Yu, C.Y.**, Hebert, L.A. Spot urine protein/creatinine ratio is an unreliable estimate of 24-hr proteinuria in most SLE nephritis flares. *Kidney Int.* 72:865-870, 2007. PubMedID: 17653137 (Impact factor: 4.773; Number of cites in ISI: 9)
- 50. Kiszel, P., Kovacs, M., Szalai, C., Yang, Y., Pozsonyi, E., Blasko, B., Laki, J., Prohaszka, Z., Fazakas, A., Panczel, P., Hosszufalusi, N., Rajczy, K., Wu, Y.L., Chung, E.K., Zhou, B., Blanchong, C.A., Vatay, A., **Yu, C.Y.**, Fust, G. (2007) Frequency of carriers of 8.1 ancestral haplotype and its fragments in two Caucasian populations. *Immunol. Invest.* 36:307-19. PubMed: 17558713 (Impact factor: 2.342; Number of cites in ISI: 3)
- 51. Wu, Y.L., Savelli, S.L., Yang, Y., Zhou, B., Rovin, B.H., Birmingham, D.J., Nagaraja, H.N., Hebert, L.A. and **Yu, C.Y**. (2007) Sensitive and specific real-time PCR assays to accurately determine copy number variations (CNVs) of human complement C4A, C4B, C4-long, C4-short and RCCX modules: Elucidation of C4 CNVs in 50 consanguineous subjects with defined HLA genotypes. *J. Immunol.* 179: 3012-3025.
 - PubMedID: 17709516 (Impact factor: 6.293; Number of cites in ISI: 20)
- 52. Shontz K.M., Zhou B., **Yu C.Y.**, Su B.Y. (2008) Cloning and functional analysis of the swine eNOS promoter. DNA Sequence, 19: 62 67 PMID: 17852356
- 53. Cohen, R.A., Bayliss, G., Crispin, J.C., Kane-Wanger, G.F., Van Beek, C.A., Kyttaris, V.C., Avalos, I., **Yu, C.Y.**, Tsokos, G.C. and Stillman, I.E. (2008) T cells and *in situ* cryoglobulin deposition in the pathogenesis of lupus nephritis. *Clin. Immunol.* 128:1-7. (Number of cites in ISI: 5)
- 54. Zhang, X., Jin M., Wu, H., Harris, N., Green-Church, K., Nagaraja, H., Birmingham, D.J., **Yu, C.Y.**, Hebert L.A., Rovin B.H. (2008) Biomarker discovery for lupus nephritis through longitudinal urine proteomics. *Kidney Int.* 74:799-807. PMID: 18596723 (Impact factor: 4.773; no. of cites in ISI: 12)
- 55. Wu, H., Birmingham, D.J., Rovin, B.H., Hackshaw, K.V., Haddady, N., Haden, D., **Yu, C.Y.**, Hebert, L.A. (2008) D-dimer level and the risk of thrombosis in SLE. *Clin. J. Am. Soc. Nephrol.* 3: 1628-1636. PMID: 18945994 (Number of cite in ISI: 2)
- 56. Santos, PS, Füst G, Prohászka Z, Volz A, Horton R, Miretti M, **Yu CY**, Beck S, Uchanska-Ziegler B, Ziegler A. (2008) Association of smoking behavior with an odorant receptor allele telomeric to the human major histocompatibility complex. *Genet.Test*.12:481-486. PMID: 18939942

- 57. Saxena, K., Kitzmiller, K.J., Wu, Y.L., Zhou, B., Esack, N., Hiremath, L., Chung, E.K., Yang, Y. and Yu, C.Y. (2009) Great genotypic and phenotypic diversities associated with copy-number variations of complement C4 and RP-C4-CYP21-TNX (RCCX) modules: a comparison of Asian Indian and European American. *Mol. Immunol.* 46: 1289-1303. PMID: 19135723 (no. of cites in ISI: 5)
- 58. Wu, Y.L., Hauptmann G., Viguier, M., and **Yu,C.Y** (2009). Molecular basis of complete complement C4 deficiency in two North- African families with systemic lupus erythematosus. *Genes Immun*. 10:433-445. PMID: 19279649. (Number of cite in ISI: 7)
- 59. Hebert, L.A., Birmingham D.J., Shidham G., Rovin B.H., Nagaraja H.N., **Yu C.Y.** (2009) Random spot urine protein/creatinine ratio is unreliable for estimating 21-hr proteinuria in individual SLE nephritis patients. *Nephron Clin. Pract.* 113: c177-82. PMID: 19672116
- 60. Fernando, M.M.A., Boteva, L., Morris D.L., Zhou B., Wu Y.L., Lokki M.-L., **Yu C.Y.**, Rioux J.D, Hollox E.J, Vyse T.J. (2010) Assessment of complement *C4* gene copy number using the paralog ratio test. *Hum. Mutat.* 31:866-874. PMID: 20506482
- 61. Soto, K., Wu Y.L., Ortiz, A., Aparício, S.R., **Yu, C.Y.** (2010) Familial C4B deficiency and immune complex glomerulonephritis. *Clin. Immunol.* 137: 166–175. PMID: 20580617
- 62. Shen, N., Fu, Q., Deng, Y, Qian X., Zhao, J., Kaufman, K.M., Wu, Y.L., **Yu, C.Y.**, Tang, Y., Chen, J.-Y., Yang, W., Wong, M., Kawasaki, A., Tsuchiya, N., Sumida, T., Kawaguchi, Y, Howe, H.S., Mok, M.Y., Bang, S.-Y., Liu, F.-L., Chang, D.-M., Takasaki, Y., Hashimoto, H., Harley, J.B., Guthridge, J.M., Grossman, J.M., Cantor, R.M., Song, Y.W., Bae, S.-C., Chen, S., Hahn, B.H., Lau, Y.L. and Tsao, B.P. (2010) Gender specific association of X-linked TLR7 with male systemic lupus erythematosus. *Proc. Natl. Acad. Sci. USA* 107:15838-15843. PMID: 20733074 (no. of cites in ISI: 8)
- 63. Birmingham, D.J., Irshaid, F., Nagaraja, H.N., Zou, X., Tsao B.P., Wu,H., **Yu, C.Y.**, Hebert, L.A., and Rovin, B.H. (2010) The complex nature of serum C3 and C4 as biomarkers of lupus renal flare. *Lupus* 19:1272-1280. PMID: 20605879
- 64. Tan W, Sunahori K, Zhao J, Deng Y, Kaufman KM, Kelly JA, Langefeld CD, Williams AH, Comeau ME, Ziegler JT, Marion MC, Bae SC, Hyun Lee J, Lee JS, Chang DM, Wook Song Y, Yu CY, Kimberly RP, Edberg JC, Brown EE, Petri MA, Ramsey-Goldman R, Vilá LM, Reveille JD, Alarcón-Riquelme ME, Harley JB, Boackle SA, Stevens AM, Hal Scofield R, Merrill JT, Freedman BI, Anaya JM, Criswell LA, Jacob CO, Vyse TJ, Niewold TB, Gaffney PM, Moser KL, Gilkeson GS, Kamen DL, James JA, Grossman JM, Hahn BH, Tsokos GC, Tsao BP; on behalf of the BIOLUPUS GENLES networks. Arthritis Rheum. 2011 May 16. doi: 10.1002/art.30452. [Epub ahead of print] PubMed PMID: 21590681.
- 65. Lessard, C.J., Adrianto, I., Kelly, J.A., Kaufman, K.M., Grundahl, K.M., Adler, A., Williams, A.H., Gallant, C., Alarcón-Riquelme, M.E., Anaya, J.-M., Bae, S.-C., Boackle, S.A., Brown, E.E., Chang, D.-M., Criswell, L.A., Edberg, J.C., Freedman, B.I., Gregersen, P.K., Gilkeson, G.S., Jacob, C.O., James, J.A., Kamen, D.L., Kimberly, R.P., Martin, J., Merrill, J.T., Niewold, T.B., Par, S.-Y., Petri, M.A., Pons-Estel, B.A., Ramsey-Goldman, R., Reveille, J.D., Song, Y.W., Stevens, A.M., Tsao, B.P., Vila, L.M., Vyse, T.J., Yu, C.-Y., Guthridge, J.M., Bruner, G.R., Langefeld, C.D., Montgomery, CG, Harley, J.B., Scofield, R.H., Gaffney, P.M. and Moser, K.L. (2011) Identification of a novel systemic lupus erythematosus susceptibility locus at 11p13 between *PDHX* and *CD44* in a multi-ethnic study. *Am. J. Hum. Genet.* 88: 83-91. PMID: 21194677 http://www.ncbi.nlm.nih.gov/pubmed/21194677

- 66. Fu, Q., Zhao, J., Qian, X., Wong, J.L.H., Kaufman, K.M., **Yu, C.Y.**, Mok, M.Y., Harley, J.B., Guthridge, J.M., Song, Y.W., Bae, S.-C., Grossman, J.M., Hahn, B.H., Arnett, F.C., Shen, N. and Tsao, B.P. (2011) Association of a functional IRF7 variant with systemic lupus erythematosus. *Arthritis Rheum.* 63: 749–754. PMID: 21360504 http://www.ncbi.nlm.nih.gov/pubmed/21360504
- 67. Ardoin, S., Birmingham, D.J., Hebert, P.L., **Yu, C.Y.**, Rovin, B.H., and Hebert, L.A. (2011) An approach to validate criteria for proteinuric flare in systemic lupus erythematosus glomerulonephritis. *Arthritis Rheum.*, 2011; 63: 2031-2037.
- 68. Wu,Y.L., Brookshire,B.P., Verani, R.R., Arnett, F.C. and **Yu, C.Y.** (2011) Clinical presentations and molecular basis of complement C1r deficiency in a male African American patient with systemic lupus erythematosus. *Lupus* 20: 1126 1134.
- 69. Zhao, J., Wu H., Khosravi, M., Cui, H., Qian, X., Kelly, J.A., Kaufman, K.M., Langefeld, C.D., Williams, A.H., Comeau, M.E., Ziegler, J.T., Marion, M.C., Adler, A., Glenn, S.B., Alarcón-Riquelme, M.E., Pons-Estel, B.A., Harley, J.B., Bae, S.C., Bang, S.-Y., Cho, S.-K., Jacob, C.O., Vyse, T.J., Niewold, T.B., Gaffney, P.M., Moser, K.L., Kimberly, R.P., Edberg, J.C., Brown, E.E., Petri, M.A., Ramsey-Goldman, R., Vilá, L.M., Reveille, J.D., James, J.A., Gilkeson, G.S., Kamen, D.L., Freedman, B.I., Anaya, J.-M., Merrill, J.T., Criswell, L.A., Scofield, R.H., Stevens, A.M., Guthridge, J.M., Chang, D.-M., Song, Y.W., Park, J.A., Lee, E.Y., Boackle, S.A., Grossman, J.M., Hahn, B.H., Goodship, T.H.J., Cantor, R.M., Yu, C.-Y., Shen, N., and Tsao, B.P. (2011) Association of genetic variants in complement factor H and factor H-related genes with systemic lupus erythematosus susceptibility. *PLoS Genet.* 7: e1002079 (1-9). PMID: 21637784
- 70. Rigby, W.F.C., Wu, Y.L., Zan, M., Rosengren, S., Carlson, C., Hilton, W. and **Yu, C.Y.** Increased frequency of complement C4B deficiency in rheumatoid arthritis. *Arthritis and Rheumatism*, in press
- 71. Kingery, S.E., Wu, Y.L., Zhou, B., Hoffman, R.P. and **Yu, C.Y.** Complement C4A and C4B as novel biomarkers for partial disease remissions in new onset type 1 diabetes mellitus patients. *Pediatric Diabetes*, in press.

B. PEER-REVIEWED, VIEWPOINT OR REVIEW ARTICLES PUBLISHED IN SCIENTIFIC JOURNALS

- 72. Carroll, M.C., Belt, K.T., Palsdottir, A., and **Yu, Y.** (1985) Molecular genetics of the fourth component of human complement and the steroid 21-hydroxylase. *Immunol. Rev.* 87:39-60. (Impact factor: 10.76; Number of cites in ISI database: 72)
- 73. Carroll, M.C., Palsdottir, A., Belt, K.T., and **Yu, C.Y.** (1986) Molecular genetics of the fourth component of human complement. *Biochem. Soc. Symp.* 51:29-36. (Impact factor: 2.171; Number of cites in ISI database: *6*)
- 74. **Yu, C.Y.** (1998) Molecular genetics of the MHC complement gene cluster. *Exp. Clin. Immunogenet.* 15:213-230. (Impact factor: 1.741; Number of cites in ISI database: *36*)
- 75. **Yu, C.Y.**, Yang, Z., Blanchong, C.A. and Miller, W. (2000) The human and mouse MHC class III region: a parade of 21 genes at the centromeric segment. *Immunol. Today* 21:320-328. (Impact factor: 10.21; Number of cites in ISI database: *23*)

- 76. Blanchong, C.A., Chung, E., Yang, Y. and Yang, Z., Moulds, J.M., and **Yu, C.Y.** (2001) Genetic, structural and functional diversities of human complement components C4A and C4B and their mouse homologues, Slp and C4. *Int. Immunopharmacol.* 1:365-392. (Impact factor: 2.203; Number of cites in ISI database: *52*)
- 77. Birmingham, D.J., Rovin, B.H., **Yu, C.Y.** and Hebert, L.A. (2001) Of mice and men: the relevance of the mouse to the study of human SLE. *Immunol. Res.* 24:211-224. (Impact factor: 2.342; Number of cites in ISI database: 7)
- 78. Martinez, O.P., Longman-Jacobsen, N., Davies, R., Chung, E.K., Yang, Y., Gaudieri S., Dawkins, R.L., and **Yu, C.Y.** (2001) Genetics of human complement component C4 and evolution the central MHC. *Front. Biosci.* 6:d904-913. (Impact factor: 2.771; Number of cites in ISI database: 9)
- 79. Yang, Z., Qu, X. and **Yu, C.Y.** (2001) Features of the two gene pairs *RD-SKI2W* and *DOM3Z-RP1* located between complement component genes factor B and C4 at the MHC class III region. *Front. Biosci.* 6:d927-935. (Impact factor: 2.771; Number of citation in ISI: 2)
- 80. **Yu, C.Y.**, Chung, E.K., Yang, Y., Blanchong, C.A., Jacobsen, N., Saxena, K., Yang, Z., Miller, W., Varga, L., and Fust, G. (2003) Dancing with complement *C4* and the *RP-C4-CYP21-TNX* (RCCX) modules of the major histocompatibility complex. *Progr. Nucl. Acid Res. Mol. Biol.* 75: 217-292. (Impact factor: 5.529; Number of cites in ISI database: *25*)
- 81. **Yu, C.Y.** and Whitacre, C.C. (2004) Sex, MHC and complement C4 in autoimmune diseases. *Trends Immunol.* 25: 694-699. (Impact factor: 10.21; Number of citation in ISI: 27)
- 82. Rovin, B.H., Birmingham, D.J., Nagaraja, H.N., **Yu, C.Y.,** and Hebert, L.A. (2007) Biomarker discovery in human SLE nephritis. *Bull. NYU Hosp. Joint Dis.* 65:187-193. PMID: 17922668
- 83. Wu, Y.L., Yang, Y., Chung, E.K., Zhou, B., Kitzmiller, K.J., Savelli, S.L., Nagaraja, H.N., Birmingham, D.J., Tsao, B.P., Rovin, B.H., Hebert, L.A. and **Yu, C.Y.** (2008) Phenotypes, genotypes and disease susceptibility associated with gene copy number variations: complement *C4* CNVs in European American healthy subjects and those with systemic lupus erythematosus. *Cytogenet. Genome Res.* 123:131-141. (Number of cites in ISI: 9)
- C. BOOK CHAPTERS AND RESEARCH PROTOCOLS (EDITOR-REVIEWED)
- 84. Reid, K.B.M., Campbell, R.D., Day, A.J., Dodds, A.W., Law, A.S.K., Lintin, S.J., Ripoche, J., Sim, R.B., Wu, L.C. and **Yu, C.Y.** (1987) Molecular biology of the human complement class III products of the MHC: Factor I and its cofactors. In *Progress of Immunology, vol.* 6, pp. 299-313.
- 85. Calabi, F., Bilsland, C.A.G., **Yu, C.Y.**, Bradbury, A., Belt K.T., Martin, L., and Milstein, C. (1989) Recent progress in the molecular study of CD1. *Leucocyte Typing IV*, Oxford University Press, pp 254-258.
- 86. Calabi, F., **Yu, C.Y.**, Bilsland, C.A. and Milstein, C. (1991) CD1: From structure to function. <u>In Immunogenetics of the Major Histocompatibility Complex</u> (Srivastava, R., Ram, B.P. and Tyle, P., eds.) VCH Publishers Inc., New York, pp. 215-243.

- 87. **Yu, C.Y.**, Wu, L.C., Buluwela, L. and Milstein, C. (1993) Cosmid cloning and walking to map human CD1 leucocyte differentiation genes. *Meth. Enzymol.* 217: 378-398. (Number of cites in ISI database: *6*)
- 88. Milstein, C., Yu, C.Y., Jarvis, J.M., Skehel, J.M. and A. Woolfson (1995) The many faces of CD1. In Leukocyte Typing V, vol.1. (Schlossman, S.E., Boumsell, L., Gilks, W.., Harlab, J.M., Kishimoto, T., Morimoto, C., Ritz, J., Shaw, S., Silverstein, R., Springer, T., Tedder, T.F., and Todd, R.F. (eds), Oxford University Press, Oxford pp 337-341.
- 89. **Yu, C.Y.**, Blanchong, C.A., Chung, E.K., Rupert, K.L., Yang, Y., Yang, Z., Zhou, B. and Moulds, J.M. (2002) Molecular genetic analyses of human complement components C4A and C4B. In *Manual of Clinical Laboratory Immunology*, 6th Edition, Chapter 13, Rose, N.R., Hamilton,R.G., Detrick,B. eds. American Society for Microbiology Press, Washington DC, pp 117-131.
- 90. Chung, E.K., Wu, Y.L., Yang, Y., Zhou, B. and **Yu, C.Y.** (2005) Human complement components C4A and C4B: complex genotypes and phenotypes. *Current Protocols in Immunology* (Coligan JE, Bierer BE, Margulis DH, Shevach EM and Strober W, eds.) John Wiley & Sons, Inc. Edison, NJ, pp 13.8.1-13.8.36.
- 91. Yang, Y., Chung, E.K., Zhou, B., Lhotta, K., Hebert, L.A., Birmingham, D.J., Rovin, B.H. and **Yu, C.Y.** (2004) The intricate role of complement component C4 in human SLE. <u>In Current Directions in Autoimmunity</u>, vol 7 (Tsokos GC, ed), Karger, Basel, pp 98-132. (Number of cites in ISI database: 54)
- 92. Yang, Y., Chung, E.K., Lhotta, K., Wu, Y.L., Higgins, G.C., Rennebohm, R.M., Hebert, L.A., Birmingham, D.J., Rovin, B.H., and **Yu, C.Y.** (2005) Complement components C4A and C4B in human lupus. In *Molecular Autoimmunity in Commemoration of the 100th Anniversary of the First Description of Human Autoimmune Disease*, Chapter 7 (Zouali M. Ed), Springer Science Business Media, Inc., New York, pp 85-99.
- 93. **Yu, C.Y.**, Hauptmann, G., Yang, Y., Wu Y.L., Birmingham, D.J., Rovin, B.H. and Hebert, L.A. (2007) Complement deficiencies in human systemic lupus erythematosus (SLE) and SLE nephritis: epidemiology and pathogenesis. <u>In</u>: *Systemic Lupus Erythematosus: a Companion to Rheumatology; Chapter 19*, (Tsokos GC, Gordon, C. and Smolen, J.S. eds) Philadelphia: Elsevier, pp183-193.
- 94. Atkinson, J.P. and **Yu, C.Y**. (2011) Genetic susceptibility and class III complement genes. <u>In</u> *Systemic Lupus Erythematosus, Fifth Edition* (Lahita RG, Buyon J, Koike T, Tsokos GC eds.), Elsevier Academic Press, pp 21-45.

C. Manuscripts Under Review

Christopher J Lessard, Indra Adrianto, John A Ice, Graham B Wiley, Jennifer A Kelly, Stuart B Glenn, Adam J Adler, He Li, Astrid Rasmussen, Adrienne H Williams, Paula S Ramos, Kiely M Grundahl, Caroline J Gallant, Marta E Alarcón-Riquelme for the BIOLUPUS and GENLES Networks, Graciela S Alarcon, Juan-Manuel Anaya, Sang-Cheol Bae, Susan A Boackle, Elizabeth E Brown Deh-Ming Chang, Lindsey A Criswell, Jeffrey C Edberg, Barry I Freedman, Gary S Gilkeson, Chaim O Jacob, Judith A James, Diane L Kamen, Robert P Kimberly, Javier Martin, Joan T Merrill, Timothy B Niewold, So-Yeon Park, Michelle A Petri, Bernardo A Pons-Estel, Rosalind Ramsey-Goldman, John D Reveille, R Hal Scofield, Yeong Wook Song, Anne M Stevens, Betty P Tsao, Luis M Vila, Timothy J Vyse, **Chack-Yung Yu**, Joel M Guthridge, Kenneth M Kaufman, John B Harley, Edward K Wakeland, Carl D

Langefeld, Patrick M Gaffney, Courtney G Montgomery, and Kathy L Moser. Identification of *IRF8, TMEM39A*, and *IKZF3-ZPBP2* as susceptibility loci for systemic lupus erythematosus in a large-scale, multi-racial replication study (submitted to AJHG)

E. EDITOR OF A SPECIAL ISSUE FOR A SCIENTIFIC JOURNAL

Yu, C.Y. and Yang, Z. (2001) Genetics, Structures and Disease Associations of the Central MHC. Special Issue for *Frontiers in Bioscience* (vol. 6). http://www.bioscience.org/current/special/yu.htm

F. DISSERTATIONS FOR MASTER'S AND DOCTORATE DEGREES

Yu C.Y. (1983) Studies of Bacteriophage T4 Gene Expression.

Thesis, Master of Philosophy,

Department of Biology, The Chinese University of Hong Kong, Hong Kong.

Advisor: Dr. Kai-Keung Mark;

Examiners: Professor Noreen E. Murray (Edinburgh, UK), Professor L.B. Thrower and Dr. Grace S.F. Li.

Yu C.Y. (1987) The Gene Structure and the Polymorphism of the Human Complement Component C4. Thesis, Doctor of Philosophy,

Department of Biochemistry and Trinity College, Oxford University, England, United Kingdom

Advisors: Professor Rodney Porter, CH, FRS, and Dr. R. Duncan Campbell;

Examiners: Professor Alan Williams, FRS; Sir Peter Lachmann, FRS