Curriculum Vitae

David C. Amberg, Ph.D.

Interim President
State University of New York (SUNY)
College of Environmental Science and Forestry
Office of the President
224 Bray Hall
1 Forestry Drive
Syracuse, NY 13210

Office: 315-470-6681
Email: dcamberg@esf.edu

Date of Birth: October 12th, 1960

Place of Birth: Vancouver, Washington

Education:

Postdoctoral Fellow
Stanford University School of Medicine
1993 – 1996
Department of Genetics – Laboratory of David Botstein

PhD, Biochemistry
Dartmouth Medical School
1987 – 1992
Department of Biochemistry-Laboratory of Charles N. Cole
Thesis Title: Isolation and characterization of essential genes of *Saccharomyces cerevisiae* required for the efficient nucleocytoplasmic trafficking of mRNA

BA, Biology/Chemistry
Whitman College
1979 – 1983

Academic Appointments:

2008-Present Professor, Department of Biochemistry & Molecular Biology, SUNY Upstate Medical University

2002-2008 Associate Professor, Department of Biochemistry & Molecular Biology, SUNY Upstate Medical University

1996-2002 Assistant Professor, Department of Biochemistry & Molecular Biology, SUNY Upstate Medical University

1996-Present Graduate Program in Biochemistry and Molecular Biology, SUNY Upstate Medical University

Leadership Positions:

July 2018	Interim President, SUNY College of Environmental Science and Forestry
Dec. 2014	Vice President for Research, SUNY Upstate Medical University
July 2014	Interim Vice President for Research, SUNY Upstate Medical University
2013-2014	Associate Vice President of Research Integrity, SUNY Upstate Medical University
2013-2014	Research Conflict of Interest Officer, SUNY Upstate Medical University
2011-2013	Assistant Vice President of Research Integrity, SUNY Upstate Medical University
2011-2014	Research Integrity Officer, SUNY Upstate Medical University
2009-2011	Chair, Graduate Program Committee, Biochemistry and Molecular Biology, SUNY Upstate Medical University

Leadership Accomplishments

Research Integrity Officer (RIO):

Recruited to be the University's first formal RIO in response to three extensive cases of research fraud. Accomplishments include: revised the University's policies and standard operating procedures for handling research misconduct to ensure compliance with the Federal Office of Research Integrity, increased awareness of the consequences of scientific misconduct by holding a year-long set of seminars and workshops on research ethics and research integrity, and presented five workshops on bioethics and research integrity at collaborating universities in Ecuador.

Vice President for Research (VPR):

Supported the research continuum by creating research-supporting roles, supporting university centers and research cores and creating programs to support, grow, and celebrate basic, translational and clinical research while implementing a "faculty first" leadership style that is transparent, highly responsive, and solution focused to positively improve campus morale among the research faculty:

- Hired a Director of Research Development to assist the faculty in identifying funding opportunities, facilitate the involvement of faculty new to research, and to marshal larger collaborative grant proposals. The Director of Research Development has successfully facilitated the submission of dozens of new grants, including two large NIH instrumentation grants.

- Supported research faculty with annual grant writing programs that include one-on-one grant writing training for faculty from Writers' Seminars and Workshops, LLC. This effort has already contributed to at least six newly-funded grant proposals from the NIH. Celebrated funded faculty with public receptions called "Celebrations of Faculty Funding Success" in order to recognize the fact that Upstate faculty have nearly doubled the number of grant proposal submissions and their success is, by far, exceeding the NIH paylines.

- Hired a quality expert to support highly FDA-regulated clinical trials and to develop curricula in GxP. This support was critical to the Center for Global Health and Translational Science obtaining $12.2 million in DoD contracts for Dengue Human Infection Models. In the future, this office will be expanded to support all GMP activities on campus and will include a clinical trial sponsorship office.

- Hired a Director of Clinical Research Initiatives to facilitate the development of faculty who are engaged in clinical research by identifying successful processes and removing roadblocks, such as improving invoicing and close-out procedures, a success that has already recovered about $1 million. The Director of Clinical Research Initiatives has also worked to increased research access to the recently adopted EPIC EHR system, Slicer/Dicer and REDCap. The strategic focus of the VPR on clinical research has led to a greater than 5-fold increase in clinical trial expenditures in four years.

- Expanded the Clinical Research Unit to include deployable clinical research associates and physician assistants to help develop and support clinical trials and support time-challenged clinical faculty in clinical research. As a result, clinical research expenditures have grown in the last four years more than 500%.

- Facilitated the growth of the Center for Global Health and Translational Science leading to the recent signing of over $12 million in new contracts with the Department of Defense and $56 million in new grant proposals submitted. As a consequence, Upstate is likely to become a national center for performing Dengue Human Infection Models for Dengue vaccine development
  See news article, here: http://www.upstate.edu/news/article.php?title=8993

Collaborated with the Office of the President and the University President's Executive Team to elevate the importance of the research mission at the University and successfully increase research expenditures: The University is now in its third consecutive year of nearly 10% annual increases in research expenditures.

Engaged with potential regional partners such as SUNY Oswego, University of Buffalo, University of Albany, Rensselaer Polytechnic Institute, and Clarkson University to assess opportunities for collaboration around pooled research resources and expertise. In addition, strengthened existing relationships with current members of the Hill Collaboration: Syracuse University, SUNY College of Environmental Science and Forestry (SUNY ESF), and the Syracuse VA Medical Center, leading to new research collaborations for faculty on each of these campuses.

Recruited local philanthropists Sam and Carol Nappi to fund an inter-disciplinary pilot grant program with Syracuse University. The first round of funding culminated in a public "Shark Tank"-like event with ten teams competing for $675,000 in grant support. This relationship led to the opportunity to work with the Nappi family when they funded an expansion of Upstate's autism treatment center, to be named the Nappi Longevity Institute, with a multimillion dollar gift that was the largest philanthropic gift in the history of Upstate.

Spearheaded the Central New York Regional Economic Development Council's successful Upstate Revitalization application for one of Gov. Cuomo's three $500-million-dollar grant awards. Our visionary proposal pools regional resources between universities, corporations, and the Air Force Research labs to create a robust support platform for data analytics across multiple sectors, with an initial focus on making Central New York a leader in research and development of precision medicine.
See news article, here: http://www.syracuse.com/business-news/index.ssf/2015/12/central_new_york_a_winner_in_cuomos_15_billion_upstate_revival_initiative.html

Assumed a leadership role within the Institute for Environmental Health and Environmental Medicine, a SUNY-funded collaboration between Upstate Medical University, SUNY ESF, SUNY Oswego and Onondaga Community College. In that role, provided direction for new computer-modeling labs and research space, including a BSL3 level insectary for the rearing and infection of disease vectors to support vaccine development research. A subsequent proposal to SUNY led to the funding of three new Empire Scholar positions to be jointly hired with SUNY ESF in vector biology, epidemiology and environmental health.

Served as an integral member in an initiative to move the Upstate Cancer Center toward designation as an NCI-designated comprehensive cancer center by leading the development of a visionary strategy and budget to build and integrate basic, translational, clinical, and population health research, culminating in the approval of the first two years of this budget with an investment of $5 million. Within this initiative oversaw the creation of three new research support cores; The Molecular Interaction and Drug Screening Core, The Upstate/Leica Center of Excellence for Light Microscopy, and the Upstate Bio-specimen Core.

Oversaw the recruitment of three world-class neuro-scientists via the SUNY Empire Scholars program.

Served as the lead PI on a successful SUNY Performance Fund proposal to build a regional Institute for Precision Medicine in collaboration with SUNY Oswego. This grant funded the recruitment of a world class bioinformatician, Dr. Vladimir Kuznetsov, the former Director of the Division of Bioinformatics at the A-Star Institute in Singapore.

Currently leading an initiative to determine feasibility to build a flexible phase 1 through phase 2 bio-production facility at Upstate; collaborating with consulting firm Deloitte on a feasibility and investment grade business case analysis showing sustainability and strong regional economic impact. Serving as a member of the team advocating for state and federal funding of this $108 million project.

Current Responsibilities as Vice President for Research:

Responsible for all strategic initiatives related to growing the research portfolio; current research expenditures ~$37 million. Despite significant reductions in numbers of research faculty and a highly competitive funding department, in FY15/16 direct research expenditures increased 8% and indirect recovery increased 14%. In this same time span clinical trial expenditures rose from $2.5M to $4.2M. FY16/17 closed out with a ~10% increase in directs and indirects and this

positive trend looks to be continuing into the next fiscal year with an almost 20% increase in F&A recovery.

As the Operations Manager for the Research Foundation responsible for assuring compliance with all state and federal regulations as concerns the use and expenditure of Research Foundation dollars.

Manage The Office of Research Administration including: IRB Administration, Sponsored Programs, The Clinical Trials Office, The Office of Technology Transfer and Commercialization, Offices of Clinical and Research Strategic Initiatives, Office of Quality Assurance, Assessment and Improvement, The Research Development Office, The Office of Research Integrity, The Clinical Research Unit, the Department of Laboratory and Animal Resources, and all research support core facilities.

Responsible for oversight of the Central New York Biotech Accelerator. Construction of this facility is now complete with the opening of a new clinical, molecular diagnostics lab for cancer genetics and the Upstate MIND (Medical Innovation and Novel Discovery) which includes a TED talk enabled Theater-in-the-MIND, a creation garage for medical device prototyping, and collision and collide space for ideation and start-up formation. This incubator is now at capacity with several new start-up companies.

Responsible for oversight of all Research Centers and Institutes, including the Center for Global Health and Translational Research

Serves on the President's University Executive Team and Extended University Executive Team, Cancer Center Leadership Council and Executive Team; Co-Chairing the search committee for the Senior Vice President for Finance.

Experience Related to Research Compliance and Integrity:

2015-	Presented a two-day workshop for Yachay, The City of Knowledge in Quito Ecuador on bioethics
2014-	Presented two, two-day workshops in Ecuador on the responsible conduct of research
2013-	Implementing web-based reporting of COI using Osprey software
2012-	Developing a campus-wide Responsible Conduct of Research training program
2012-	Revised University's Conflict of Interest Policy
2012	Reviewed and purchased computer data management and forensics software for the University (Encase)
2011-2012	Completed two formal assessments of allegations of research misconduct, one was referred to the IRB and thereby kept within the compliance arena, the second was dismissed and concluded to be the result of bad faith allegations
2011-2013	Administered a research misconduct investigation
2011	Designed a new Research Integrity Office, the RIO office design is optimized to facilitate confidential meetings and data sequestration
2011	Designed a new Research Integrity web page for the purpose of increasing the visibility of the RIO and the availability of policies and information related to integrity and compliance
2011	Drafted University guidelines for authorship, designed to prevent spurious allegations of plagiarism

2011	Implemented 10 Standard Operating Procedures that guide all steps of University research misconduct procedures
2011	Re-wrote and expanded the University's Research Misconduct Policies
2011	Attended a "RIO Bootcamp" organized by the Office of Research Integrity, PHS
2010-2011	Chair, Scientific Misconduct Oversight Committee of Michael W. Miller
2009	Chair, Research Misconduct Investigation of Jennifer Jamieson, resulted in findings of scientific misconduct by the Office of Research Integrity, PHS

Departmental and Institutional Service:

2011	Organizer and moderator of a public health symposium on The Health Implications of Hydrofracking at SUNY Upstate Medical University
2010-2011	*Chair,* Scientific Misconduct Oversight Committee
2009-2010	*Member*, Graduate Curriculum Committee
2009-2010	*Member,* Graduate Rules Committee
2009	*Chair,* Biochemistry Graduate Committee
2009	*Chair*, Scientific Misconduct Investigation Committee
2005-2006	*Member*, Presidential Search Committee (2005-2006): successfully placed Dr. David Smith as the current President of SUNY Upstate Medical University.
2005	*Member*, Pharmacology Faculty Search Committee
2003	*Director*, Graduate Course GS601-Foundations of Biomedical Science
1999-2003	*Director*, Biomedical Sciences Retreat
2002	*Member*, Graduate Curriculum Review Committee
2000	*Co-Chair*, Northeast Regional Yeast Meeting held in Syracuse, NY
2000-Present	*Coordinator*, Biochemistry and Molecular Biology seminar series
1997-2001	*Coordinator*, Cell and Molecular Biology Program seminar series
1997-2003	*Member*, Graduate Admissions Committee for Biochemistry and Molecular Biology
2002-2004	*Member*, Graduate Admissions Committee for Biomedical Sciences
2002-2011	*Member*, Five Biochemistry and Molecular Biology Faculty Search Committees
2001	*Member*, Cell and Developmental Biology Chair Search Committee
2001	*Member*, MSI Curriculum Renewal Committee- First Semester Subcommittee
2001-2003	*Member*, Advisory Committee for the Biomedical Sciences Graduate Program

National/International Service:

2010	NIH Fellowship Panel
2001-2005	Instructor, Cold Spring Harbor Yeast Genetics and Genomics Course
Present	Journal reviewer: Eukaryotic Cell, Genetics, Molecular Biology of the Cell, Molecular and Cellular Biology, Journal of Cell Biology, Protein Science
Past	Reviewer: National Science Foundation, Croatian Unity Through Knowledge Fund, Medical Research Council of Canada

Community Service:

2004-2014	*Volunteer driver*, Meals on Wheels of Syracuse
1998-Present	*Member*, CNY Dirt, a Syracuse area mountain biking advocacy group: ride leader, trail maintenance, trail advocacy
2005-Present	Earth Day Cleanup in Labrador Hollow Unique Area
2014	Carol Baldwin Run for their Lives
2015-17	Champion rider in the American Diabetes Association Tour de Cure

Honors and Awards:

2012	Chancellor's Award for Excellence in Scholarship and Creative Activities, State University of New York
2011	President's Award for Excellence and Leadership in Research, SUNY Upstate Medical University
2009-Present	Jacobsen Scholar, SUNY Upstate Medical University
2004	President's Award for Excellence in Teaching, SUNY Upstate Medical University
2004	Outstanding Teacher Award, College of Graduate Studies, SUNY Upstate Medical University
1993-1996	Smith Kline Beecham Pharmaceuticals Fellow of the Life Sciences Research Foundation
1991-1992	Ryan Fellow, Dartmouth Medical School
1983	Graduated *cum laude,* Whitman College
1983	Phi Beta Kappa, Whitman College

Grants:

NIH RO1 – The Role of Aip3p in Regulating Actin Organization
5/1998 – 5/2003
$707,935

AHA GIA – The Role of Old Yellow Enzyme in Regulating Actin Assembly
7/1999 – 7/2002
$118,902

NIH RO1 – Regulation of Actin Dynamics (renewal of above)
7/2003 – 6/2007
$792,000

NIH RO1 – Toward a Complete Genetic Description of the Yeast Actin Cytoskeleton.
2/2007-2/2011.
$1,000,000

NIH RO1 – Regulation of Actin Dynamics (funded through ARRA)
9/30/09-8/31/11.
$350,000

Hendricks Bridge Grant
6/15/2012-6/14/2013
$50,000

Carol M. Baldwin Breast Cancer Fund-Identification of New Combinatorial Drug Targets for Breast Cancer.
12/2012-11/2014
$50,000

Teaching:

Present:

Lecturer, Molecular and Cellular Principles of Medicine
Conference Leader, Molecular and Cellular Principles of Medicine
Instructor, Clinical Problem Sets – Molecular and Cellular Principles of Medicine
Developer and Director, Graduate course, The Systems Biology of Genetics, Genomics and Proteomics
Lecturer, The Systems Biology of Genetics, Genomics and Proteomics -5 lectures.
Lecturer, Responsible Conduct of Scientific Research I and II

Past:

Graduate Thesis Advisor to Dimitra Aggeli
Section Leader, Cell and Molecular Biology Journal Club
Graduate Grant Writing Course, Advisor to Kelly Keenan, Adrian McNairn, and Jie Peng
Lecturer, Cell and Molecular Biology for medical students
Lecturer, Biochemistry for Graduate Students-three lectures on mutagenesis and translation
Lecturer, one section of Advanced Biochemistry for graduate students
Lecturer, Biochemistry, Cell and Molecular Biology course
Graduate Thesis Advisor to Hui Jin, Tatiana Yuzyuk and Blaine Bettinger, Michael Clark, and Michelle Farah.
Lecturer, Foundations of Biomedical Science for Graduate Students
Instructor, Cold Spring Harbor Yeast Genetics Course (2001-2005).

College of Graduate Studies Thesis Committees and Qualifying Exams:

Thesis Committees:

David Terfera	Kip West	Boyd Butler
Ti Cai	Smita Archibold	Surjit Chandhoke
Michael Curtis	Adrian McNairn	Colleen Kummel
Kelly Keenan	Mark Butler	Rong Rong
Qin He	Jason Aulds	Haifeng Yang (S.U.)
Susan Keezor	Yiqioung Yuan	Mohammad Haeri
Mehdi Najafi	Adem Koksal	Jon Nardozi
Sheen Claire Li	Kaylen Lott	Sudha Neelan
Lingyan Jiang	Rene Laird	Heba Diab
Kelly Crouse	Cherry Ignacio	Ki Liu

Qualifying Exams:

David Terfera	Boyd Butler	Mohammed Haeri
Charisse Schleuter	Rong Rong	Adam Olia
Kelly Keenan	Surjit Chandhoke	Sheena Li
Mark Butler	Joanne Montalbano	Kip West
Adrian McNairn	Hong Sun	Chris Cox
Jim Butler	Beth Eischen	Chunlei Gao
Jason Aulds	Katherine Ptaschinski	Akos Mersich
Kaylen Lott	Colleen Kuemmel	Wei Chun Ng Ivayla Geneva
Mohammad Haeri	Joel Wilmore	Ki Lui
Chris Luchesi		

Trainees:
Hui Jin, Ph.D. 2001
Astrid Hoes Helfant, Masters 2002
Tatiana Yuzyuk, Ph.D. 2003
Michael Clark, Ph.D. 2006
Blaine Bettinger, Ph.D. 2006
Michelle Farah, Ph.D. 2009
Dimitra Aggeli, Ph.D. 2014

Publications:

Journal Articles:

Silva, RC., Dautel, M., Di Genova, BM., **Amberg, DC.**, Castilho, BA., and Sattlegger, E. (2015) The Gcn2 Regulator Yih1 Interacts with the Cyclin Dependent Kinase Cdc28 and Promotes Cell Cycle Progression through G2/M in Budding Yeast. *PLOS One,* July 15 2015.

Aggeli D, Kish-Trier E, Haarer B., Cingolani G, Wilkins S, and **Amberg D.C.** (2014) Coordination of the Filament Stabilizing Versus Destabilizing Activities of Cofilin Through its Secondary Binding Site on Actin. (2014) *Cytoskeleton,* 71:361-79.

DiPrima S, Haarer B, Viggiano S, Pons, C, Myers CL, and **Amberg DC** (2014) Linking genetics to structural biology: complex heterozygosity screening with actin alanine scan alleles identifies functionally related surfaces on yeast actin. (2014) *G3: Genes/Genomes/Genetics*, 4:1491-501.

Haarer, B., Mi-Mi, L., Cho, J., Cortese, M., Viggiano, S., Burke, D., and **Amberg, D.C.** Actin Dosage Lethality Screening in Yeast Mediated by Selective Ploidy Abalation Reveals Links to Urmylation/Wobble Codon Recognition and Chromosome Stability. (2013) *G3: Genes/Genomes/Genetics*, 3:553-561.

Haarer, B., Aggeli, D., Viggiano, S., Burke, D.J., and **Amberg, D.C.** Novel Interactions between Actin and the Proteasome Revealed by Complex Haploinsufficiency. (2011) *PLOS Genetics,* 7: e1002288.

Farah, M.E., Sirotkin, V., Haarer, B., Kakhniashvili, D., and **Amberg, D.C.** Diverse Protective Roles of the Actin Cytoskeleton During Oxidative Stress. (2011) *Cytoskeleton*, 68: 340-354.

Viggiano S, Haarer B, and **Amberg DC**. Correction/Completion of the yeast actin, alanine scan alleles. (2010) *Genetics*, 185: 391-394.

Scarcelli JJ, Viggiano S, Hodge CA, Heath CV, **Amberg DC**, and Cole CN. Synthetic genetic array analysis in *Saccharomyces cerevisiae* provides evidence for an interaction between *RAT8/DBP5* and genes encoding P-body components. (2008) *Genetics*, 179: 1945-1955.

Clark MG and **Amberg DC.** Biochemical and genetic analyses provide insight into the structural and mechanistic properties of actin filament disassembly by the Aip1p-cofilin complex in *Saccharomyces cerevisiae*. (2007) *Genetics,* 176: 1527-39.

Bettinger BT and **Amberg DC.** MEKK4/*SSK2* in the mammalian and yeast stress response. (2007) *J. Cell. Biochem.,* 101: 34-43.

Bettinger BT, Clark MG and **Amberg DC.** Requirement for the polarisome and formin function in Ssk2p-mediated actin recovery from osmotic stress in *Saccharomyces cerevisiae*. (2007) *Genetics,* 175:1637-1648.

Haarer BK, Viggiano SC, Hibbs MA, Troyanskaya OG and **Amberg DC.** Modeling complex genetic interactions in a simple eukaryotic genome: Actin displays a rich spectrum of complex haploinsufficiencies. (2007) *Genes and Devel.;* 21: 148-159. This article was featured on the cover and in a perspective published in the same issue.

Farah ME and **Amberg DC.** Conserved actin cysteine residues are oxidative stress sensors that can regulate cell death in yeast. (2007) *Molec. Biol. Cell,* 18: 1359-1365.

Haarer BK, Helfant AH, and **Amberg DC.** Stable pre-anaphase spindle positioning requires Bud6p/Aip3p and an apparent interaction between the spindle pole bodies and the neck. (2007) *Euk. Cell*, 6:797-807.

Daniel JA, Yoo J, Bettinger BT, **Amberg DC** and Burke DJ. Eliminating gene conversion improves high-throughput genetics in *Saccharomyces cerevisiae*. (2006) *Genetics;* 172: 709-711.

Clark MG, Teply J, Haarer BK, Viggiano SC, Sept D, and **Amberg DC.** A genetic dissection of Aip1p's interactions leads to a model for Aip1p-cofilin cooperative activities. (2006) *Molec. Biol. Cell;* 17: 1971-1984.

Bettinger BT, Gilbert DM and **Amberg DC.** Actin up in the nucleus. (2004) *Nat. Rev. Mol. Cell Biol.;* 5: 410-415.

Yuzyuk T and **Amberg DC.** Actin recovery and bud emergence in osmotically stressed cells requires the conserved actin interacting mitogen-activated protein kinase kinase kinase Ssk2p/MTK1 and the scaffold protein Spa2p. (2003) *Molec. Biol. Cell.;* 14: 3013-3026.

Yuzyuk T, Foehr M and **Amberg DC.** The MEK kinase Ssk2p promotes actin cytoskeleton recovery after osmotic stress. (2002) *Molec. Biol. Cell.;* 13: 2869-2880.

Jin H and **Amberg DC.** (2001) Fission yeast Aip3p (spAip3p) is required for an alternative actin-directed polarity program. (2001) *Molec. Biol. Cell;* 12: 1275-1291.

Jin H and **Amberg DC.** The secretory pathway mediates localization of the cell polarity regulator Aip3p/Bud6p. (2000) *Molec. Biol. Cell*; 11: 647-661.

Rodal AA, Tetreault J, Lappalainen P, Drubin DG and **Amberg DC.** Aip1p interacts with cofilin to disassemble actin filaments. (1999) *J. Cell Biol;* 145: 1251-1264.

Chelstowska A, Liu Z, Jia Y, **Amberg DC** and Butow RA. Signalling between mitochondria and the nucleus regulates the expression of a new D-lactate dehydrogenase activity in yeast. (1999) *Yeast;* 15: 1377-1391.

Amberg DC. Three-dimensional imaging of the yeast actin cytoskeleton through the budding cell cycle. (1998) *Mol. Biol. Cell;* 9: 3259-3262.

Amberg DC, Zahner JE, Mulholland, Pringle JR and Botstein D. Aip3p/Bud6p, a yeast actin-interacting protein that is involved in morphogenesis and the selection of bipolar budding sites. (1997) *Mol. Biol. Cell;* 8: 729-753.

Saavedra C, Tung K-S, **Amberg DC,** Hopper AK and Cole CN. Regulation of mRNA Export in Response to Stress in *Saccharomyces cerevisiae*. (1996) *Genes and Devel.;* 10:1608-20.

Amberg DC, Botstein D, Beasley EM. Precise gene disruption in *Saccharomyces cerevisiae* by double fusion polymerase chain reaction. (1995) *Yeast*; 11: 1275-1280.

Heath CV, Copeland CS, **Amberg DC,** Del Priore V, Snyder M, Cole CN. Nuclear pore complex clustering and nuclear accumulation of poly(A)$^+$ RNA associated with mutation of the *Saccharomyces cerevisiae RAT2/NUP120* gene. (1995) *J. Cell Biol.;* 131: 1677-97.

Li O, Heath CV, **Amberg DC,** Dockendorff TC, Copeland CS, Snyder M, Cole CN. Mutation or deletion of the *Saccharomyces cerevisiae RAT3/NUP133* gene causes temperature-dependent nuclear accumulation of poly(A)+ RNA and constitutive clustering of nuclear pore complexes. (1995) *Mol. Biol. Cell;* 6: 401-417.

Amberg DC, Basart E, Botstein D. Defining Protein Interactions with Yeast Actin *in vivo*. (1995) *Nature Structural Biology*; 2: 28-35

Bogerd AM, Hoffman JA, **Amberg DC,** Fink G, Davis LI. *nup1* mutants exhibit pleitropic defects in nuclear pore complex function. (1994) *J. Cell Biol.;* 127: 319-332

Amberg DC, Fleischmann M, Stagljar I, Cole CN, Aebi M. Nuclear *PRP20* Protein is Required for mRNA Export. (1993) *EMBO J.*; 12: 233-241

Amberg DC, Goldstein AL, Cole CN. Isolation and characterization of *RAT1*: an essential gene of *Saccharomyces cerevisiae* required for the efficient nucleocytoplasmic trafficking of mRNA. (1992) *Genes Devel.*; 6: 1173-1189

Prickett KS, **Amberg DC,** Hopp TP. A calcium dependent antibody for identification and purification of recombinant proteins. (1989) *Biotechniques*; 7: 580-589

Book Chapters:

Amberg DC and Botstein D. Obtaining structural information about multi-protein complexes with the two-hybrid system. *In* "The Two-Hybrid System" (P.L. Bartel and S. Fields, eds.), pgs. 99-108, Oxford University Press, Oxford (1997).

Botstein D, **Amberg D,** Mulholland J, Huffaker T, Adams A, Drubin D and Stearns T. The Yeast Cytoskeleton. *In* "The Molecular and Cellular Biology of the Yeast *Saccharomyces:* Cell Cycle and Cell Biology" (J.R. Pringle, J.R. Broach, and E.W. Jones, eds.), pgs. 1-90, Cold Spring Harbor Laboratory Press, Cold Spring Harbor (1997).

Cole CN, Heath CV, Hodge CA, Hammell CM, and **Amberg DC.** Analysis of RNA export, *Methods in Enzymology,* 351:568-587 (2002).

Amberg, D, Leadsham, JE, Kotiadis, V, and Gourlay, CW. Cellular ageing and the actin cytoskeleton, *Sub-cellular Biochemistry*, 57:331-352 (2012).

Amberg, D.C. and Burke, D.J. Classical Genetics with Saccharomyces cerevisiae. *Cold Spring Harb. Protoc*. 2016

Books:

Amberg DC, Burke D and Strathern J. Methods in Yeast Genetics. Cold Spring Harbor Press (2005).