

1. Huebinger J, Grecco H, Masip ME, Christmann J, Fuhr GR, Bastiaens PIH. Ultrarapid cryo-arrest of living cells on a microscope enables multiscale imaging of out-of-equilibrium molecular patterns. *Sci Adv*. 2021 Dec 10;7(50):eabk0882. doi: 10.1126/sciadv.abk0882. Epub 2021 Dec 10.
2. Brüggemann Y, Karajannis LS, Stanoev A, Stallaert W, Bastiaens PIH. Growth factor-dependent ErbB vesicular dynamics couple receptor signaling to spatially and functionally distinct Erk pools. *Science Signaling* 18 May 2021: Vol. 14, Issue 683, eabd9943. DOI: 10.1126/scisignal.abd9943
3. Schmick M, Bastiaens PIH. Understanding Ras Spatial Cycles Through Reaction-Diffusion Simulations. *Methods Mol Biol*. 2021;2262:199-215. doi: 10.1007/978-1-0716-1190-6_11.
4. Gavriljuk K, Scocozza B, Ghasemalizadeh F, Seidel H, Nandan AP, Campos-Medina M, Schmick M, Koseska A, Bastiaens PIH. A self-organized synthetic morphogenic liposome responds with shape changes to local light cues. *Nat Commun* 12, 1548 (2021). <https://doi.org/10.1038/s41467-021-21679-2>
5. Koseska A, Bastiaens PIH. Processing Temporal Growth Factor Patterns by an Epidermal Growth Factor Receptor Network Dynamically Established in Space. *Annu Rev Cell Dev Biol*. 2020 Oct 6;36:359-383. doi: 10.1146/annurev-cellbio-013020-103810. Epub 2020 Jul 21. PMID: 32692593.
6. Garivet G, Hofer W, Konitsiotis A, Klein C, Kaiser N, Mejuch T, Fansa E, Alsaabi R, Wittinghofer A, Bastiaens PIH, Waldmann H. Small-Molecule Inhibition of the UNC-Src Interaction Impairs Dynamic Src Localization in Cells. *Cell Chem Biol*. 2019 Mar 13. pii: S2451-9456(19)30074-1. doi: 10.1016/j.chembiol.2019.02.019. [Epub ahead of print] PubMed PMID: 30956149.
7. Baumdick M, Gelléri M, Uttamapinant C, Beránek V, Chin JW, Bastiaens PIH. A conformational sensor based on genetic code expansion reveals an autocatalytic component in EGFR activation. *Nat Commun*. 2018 Sep 21;9(1):3847. doi: 10.1038/s41467-018-06299-7. PubMed PMID: 30242154.
8. Klein CH, Truxius DC, Vogel HA, Harizanova J, Murarka S, Martín-Gago P, Bastiaens PIH. PDE δ inhibition impedes the proliferation and survival of human colorectal cancer cell lines harboring oncogenic KRas. *Int J Cancer*. 2018 Sep 8. doi: 10.1002/ijc.31859. [Epub ahead of print] PubMed PMID: 30194764.
9. Corbat AA, Schuermann KC, Liguzinski P, Radon Y, Bastiaens PIH, Verveer PJ, Grecco HE. Co-imaging extrinsic, intrinsic and effector caspase activity by fluorescence anisotropy microscopy. *Redox Biol*. 2018 Aug 9;19:210-217. doi: 10.1016/j.redox.2018.07.023. [Epub ahead of print] PubMed PMID: 30176560.
10. Stanoev A, Mhamane A, Schuermann KC, Grecco HE, Stallaert W, Baumdick M, Brüggemann Y, Joshi MS, Roda-Navarro P, Fengler S, Stockert R, Roßmannek L, Luig J, Koseska A, Bastiaens PIH. Interdependence between EGFR and Phosphatases Spatially Established by Vesicular Dynamics Generates a Growth Factor Sensing and Responding Network. *Cell Syst*. 2018 Jul 18. pii: S2405-4712(18)30246-1. doi: 10.1016/j.cels.2018.06.006. [Epub ahead of print] PubMed PMID: 30145116.
11. Stallaert W, Brüggemann Y, Sabet O, Baak L, Gattiglio M, Bastiaens PIH. Contact inhibitory Eph signaling suppresses EGF-promoted cell migration by decoupling EGFR activity from vesicular recycling. *Sci Signal*. 2018 Jul 31;11(541). pii: eaat0114. doi: 10.1126/scisignal.aat0114. PubMed PMID: 30065026
12. Koos B, Christmann J, Plettenberg S, Käding D, Becker J, Keteku M, Klein C, Imtiaz S, Janning P, Bastiaens PIH, Wehner F. Hypertonicity-induced cation channels in HepG2 cells: architecture and role in proliferation vs. apoptosis. *J Physiol*. 2018 Apr 1;596(7):1227-1241. doi: 10.1113/JP275827.
13. Tsutsumi R, Harizanova J, Stockert R, Schröder K, Bastiaens PIH, Neel BG. Assay to visualize specific protein oxidation reveals spatio-

- temporal regulation of SHP2. *Nat Commun.* 2017 Sep 6;8(1):466. doi: 10.1038/s41467-017-00503-w.
14. Konitsiotis AD, Roßmannek L, Stanoev A, Schmick M, Bastiaens PIH. Spatial cycles mediated by UNC119 solubilisation maintain Src family kinases plasma membrane localisation. *Nature Communications* 8, Article number: 114 (2017) doi:10.1038/s41467-017-00116-3
 15. Huebinger J, Masip ME, Christmann J, Wehner F, Bastiaens PIH. Reversible Cryo-arrests of Living Cells to Pause Molecular Movements for High-resolution Imaging. *Bio Protoc.* 2017 Apr 20;7(8). pii: e2236. doi: 10.21769/BioProtoc.2236. PubMed PMID: 28580376; PubMed Central PMCID: PMC5450929.
 16. Koseska A, Bastiaens PI. Cell signaling as a cognitive process. *EMBO J.* 2017 Jan 30. pii: e201695383. doi: 10.15252/embj.201695383. [Epub ahead of print]Review. PubMed PMID: 28137748.
 17. Martín-Gago P, Fansa EK, Klein CH, Murarka S, Janning P, Schürmann M, Metz M, Ismail S, Schultz-Fademrecht C, Baumann M, Bastiaens PI, Wittinghofer A, Waldmann H. A PDE6 δ -Kras Inhibitor Chemotype with up to Seven H-Bonds and Picomolar Affinity that Prevents Efficient Inhibitor Release by Arl2. *Angew Chem Int Ed Engl.* 2017 Jan 20. doi: 10.1002/anie.201610957. [Epub ahead of print] PubMed PMID: 28106325.
 18. Masip ME, Huebinger J, Christmann J, Sabet O, Wehner F, Konitsiotis A, Fuhr GR, Bastiaens PI. Reversible cryo-arrest for imaging molecules in living cells at high spatial resolution. *Nat Methods* 2016 Aug;13(8):665-72.doi: 10.1038/nmeth.3921.
 19. Papke B, Murarka S, Vogel HA, Martín-Gago P, Kovacevic M, Truxius DC, Fansa EK, Ismail S, Zimmermann G, Heinelt K, Schultz-Fademrecht C, Al Saabi A, Baumann M, Nussbaumer P, Wittinghofer A, Waldmann H, Bastiaens PI. Identification of pyrazolopyridazinones as PDE δ inhibitors. *Nat Commun.* 2016 Apr 20;7:11360. doi: 10.1038/ncomms11360.
 20. Baumdick M, Brüggemann Y, Schmick M, Xouri G, Sabet O, Davis L, Chin JW, Bastiaens PI. EGF-dependent re-routing of vesicular recycling switches spontaneous phosphorylation suppression to EGFR signaling. *Elife.* 2015 Nov 26;4. pii: e12223. doi: 10.7554/eLife.12223. PubMed PMID: 26609808.
 21. Christmann J, Azer L, Dörr D, Fuhr GR, Bastiaens PI, Wehner F. Adaptive responses of cell hydration to a low temperature arrest. *J Physiol.* 2016 Mar 15;594(6):1663-76. doi: 10.1113/JP271245. PubMed PMID: 26593308.
 22. Ibach J, Radon Y, Gelléri M, Sonntag MH, Brunsveld L, Bastiaens PI, Verveer PJ. Single Particle Tracking Reveals that EGFR Signaling Activity Is Amplified in Clathrin-Coated Pits. *PLoS One.* 2015 Nov 17;10(11):e0143162. doi:10.1371/journal.pone.0143162. eCollection 2015. PubMed PMID: 26575183; PubMed Central PMCID: PMC4648588.
 23. Huebinger J, Han HM, Hofnagel O, Vetter IR, Bastiaens PI, Grabenbauer M. Direct Measurement of Water States in Cryopreserved Cells Reveals Tolerance toward Ice Crystallization. *Biophys J.* 2016 Feb 23;110(4):840-9. doi: 10.1016/j.bpj.2015.09.029. PubMed PMID: 26541066.
 24. Sabet O, Stockert R, Xouri G, Brüggemann Y, Stanoev A, Bastiaens PI. Ubiquitination switches EphA2 vesicular traffic from a continuous safeguard to a finite signalling mode. *Nat Commun.* 2015 Aug 21;6:8047. doi: 10.1038/ncomms9047. PubMed PMID: 26292967.
 25. Nakhaei-Rad S, Nakhaeizadeh H, Kordes C, Cirstea IC, Schmick M, Dvorsky R, Bastiaens PI, Häussinger D, Ahmadian MR. The Function of Embryonic Stem Cell-expressed RAS (E-RAS), a Unique RAS Family Member, Correlates with Its Additional Motifs and Its Structural Properties. *J Biol Chem.* 2015 Jun 19;290(25):15892-903. doi: 10.1074/jbc.M115.640607.

- Epub 2015 May 4. PubMed PMID: 25940089; PubMed Central PMCID: PMC4505495.
26. Schmick M, Kraemer A, Bastiaens PI. Ras moves to stay in place. *Trends Cell Biol.* 2015 Mar 7. pii: S0962-8924(15)00030-6. doi: 10.1016/j.tcb.2015.02.004. Epub 2015 Mar 8. Review. PubMed PMID: 25759176.
 27. Berg V, Rusch M, Vartak N, Jüngst C, Schauss A, Waldmann H, Hedberg C, Pallasch CP, Bastiaens PI, Hallek M, Wendtner CM, Frenzel LP. miRs-138 and -424 control palmitoylation-dependent CD95-mediated cell death by targeting acyl protein thioesterases 1 and 2 in chronic lymphocytic leukemia. *Blood.* 2015 Feb 10. pii: blood-2014-07-586511. [Epub ahead of print] PubMed PMID: 25670628.
 28. Roda-Navarro P, Bastiaens PI. Dynamic recruitment of protein tyrosine phosphatase PTPD1 to EGF stimulation sites potentiates EGFR activation. *PLoS One.* 2014 Jul 25;9(7):e103203. doi: 10.1371/journal.pone.0103203.
 29. Schmick, M., Vartak, N., Papke, B., Kovacevic, M., Truxius, D.C., Rossmannek, L., Bastiaens, P.I.H.: KRas Localizes to the Plasma Membrane by Spatial Cycles of Solubilization, Trapping and Vesicular Transport. *Cell.* 2014 Apr 10;157(2):459-471. doi: 10.1016/j.cell.2014.02.051.
 30. Schmick, M., Bastiaens, P.I.H.: The interdependence of membrane-shape and signal processing in cells. *Cell.* 2014 Mar 13;156(6):1132-1138. doi: 10.1016/j.cell.2014.02.007.
 31. Arrabito G, Schroeder H, Schröder K, Filips C, Marggraf U, Dopp C, Venkatachalapathy M, Dehmelt L, Bastiaens PI, Neyer A, Niemeyer CM. Configurable Low-Cost Plotter Device for Fabrication of Multi-Color Sub-Cellular Scale Microarrays. *Small.* 2014 Mar 27. doi: 10.1002/sml.201303390. [Epub ahead of print]
 32. Schaupp, A., Sabet, O., Dudanova, I., Ponserre, M., Bastiaens, P.I.H., Klein, R.: The composition of EphB2 clusters determines the strength in the cellular repulsion response. *J Cell Biol.* 2014 Feb 3;204(3):409-22. doi: 10.1083/jcb.201305037.
 33. Vartak, N., Papke, B., Grecco, H.E., Rossmannek, L., Waldmann, H., Hedberg, C., Bastiaens, P.I.H.: Autocatalytic APT depalmitoylation maintains spatial organization of palmitoylated membrane proteins. *Biophys J.* 2014 Jan 7;106(1):93-105. doi: 10.1016/j.bpj.2013.11.024.
 34. Symeonidou IE, Kotsantis P, Roukos V, Rapsomaniki MA, Grecco HE, Bastiaens P, Taraviras S, Lygerou Z. Multi-step loading of human Mini Chromosome Maintenance proteins in live human cells. *J Biol Chem.* 2013 Dec 13;288(50):35852-67. doi: 10.1074/jbc.M113.474825.
 35. Arrabito G, Reisewitz S, Dehmelt L, Bastiaens PI, Pignataro B, Schroeder H, Niemeyer CM. Biochips for Cell Biology by Combined Dip-Pen Nanolithography and DNA-Directed Protein Immobilization. *Small.* 2013 Jul 24. doi:10.1002/sml.201300941. [Epub ahead of print] PubMed PMID: 23881817.
 36. Zimmermann G, Papke B, Ismail S, Vartak N, Chandra A, Hoffmann M, Hahn SA, Triola G, Wittinghofer A, Bastiaens PI, Waldmann H. Small molecule inhibition of the KRAS-PDE δ interaction impairs oncogenic KRAS signalling. *Nature* 2013 May 30; 497(7451):638-42.
 37. Bierbaum M, Bastiaens PI. Cell Cycle-Dependent Binding Modes of the Ran Exchange Factor RCC1 to Chromatin. *Biophys J.* 2013 Apr 16;104(8):1642-51.
 38. Grecco HE, Bastiaens PI. Quantifying Cellular Dynamics by Fluorescence Resonance Energy Transfer (FRET) Microscopy. *Curr Protoc Neurosci.* 2013 Apr;Chapter 5:Unit5.22.

39. Gandor S, Reisewitz S, Venkatachalapathy M, Arrabito G, Reibner M, Schröder H, Ruf K, Niemeyer CM, Bastiaens PI, Dehmelt L. A Protein-Interaction Array Inside a Living Cell. *Angew Chem Int Ed Engl.* 2013 Apr 26;52(18):4790-4.
40. Blümer J, Rey J, Dehmelt L, Mazel T, Wu YW, Bastiaens P, Goody RS, Itzen A. RabGEFs are a major determinant for specific Rab membrane targeting. *J Cell Biol.* 2013 Feb 4;200(3):287-300.
41. van Wijk SJ, Fiskin E, Putyrski M, Pampaloni F, Hou J, Wild P, Kensche T, Grecco HE, Bastiaens P, Dikic I. Fluorescence-based sensors to monitor localization and functions of linear and k63-linked ubiquitin chains in cells. *Mol Cell.* 2012 Sep 14;47(5):797-809.
42. Fengler S, Bastiaens PI, Grecco HE, Roda-Navarro P. Optimizing cell arrays for accurate functional genomics. *BMC Res Notes.* 2012 Jul 17;5(1):358. [Epub ahead of print]
43. Haj FG, Sabet O, Kinkhabwala A, Wimmer-Kleikamp S, Roukos V, Han HM, Grabenbauer M, Bierbaum M, Antony C, Neel BG, Bastiaens PI. Regulation of Signaling at Regions of Cell-Cell Contact by Endoplasmic Reticulum-Bound Protein-Tyrosine Phosphatase 1B. *PLoS One.* 2012;7(5):e36633.
44. Görmer K, Bürger M, Kruijtzter JA, Vetter I, Vartak N, Brunsveld L, Bastiaens PI, Liskamp RM, Triola G, Waldmann H. Chemical-biological exploration of the limits of the Ras de- and repalmitoylating machinery. *Chembiochem.* 2012 May 7;13(7):1017-23.
45. Milroy LG, Rizzo S, Calderon A, Ellinger B, Erdmann S, Mondry J, Verveer P, Bastiaens P, Waldmann H, Dehmelt L, Arndt HD. Selective Chemical Imaging of Static Actin in Live Cells. *J Am Chem Soc.* 134(20):8480-6. 2012 May 14.
46. Chandra A, Grecco HE, Pisupati V, Perera D, Cassidy L, Skoulidis F, Ismail SA, Hedberg C, Hanzal-Bayer M, Venkitaraman AR, Wittinghofer A, Bastiaens PI. The GDI-like solubilizing factor PDE ϵ sustains the spatial organization and signalling of Ras family proteins. *Nat Cell Biol.* 2011 Dec 18;14(2):148-58. Erratum in: *Nat Cell Biol.* 2012 Mar;14(3):329.
47. Janes PW, Griesshaber B, Atapattu L, Nievergall E, Hii LL, Mensinga A, Chheang C, Day BW, Boyd AW, Bastiaens PI, Jørgensen C, Pawson T, Lackmann M. Eph receptor function is modulated by heterooligomerization of A and B type Eph receptors. *J Cell Biol.* 2011 Dec 12;195(6):1033-45.
48. Ismail SA, Chen YX, Rusinova A, Chandra A, Bierbaum M, Gremer L, Triola G, Waldmann H, Bastiaens PI, Wittinghofer A. Arl2-GTP and Arl3-GTP regulate a GDI-like transport system for farnesylated cargo. *Nat Chem Biol.* 2011 Oct 16;7(12):942-9.
49. Grecco HE, Roda-Navarro P, Fengler S, Bastiaens PI. High-throughput quantification of posttranslational modifications in situ by CA-FLIM. *Methods Enzymol.* 2011;500:37-58.
50. Hedberg C, Dekker FJ, Rusch M, Renner S, Wetzel S, Vartak N, Gerding-Reimers C, Bon RS, Bastiaens PI, Waldmann H. Development of Highly Potent Inhibitors of the Ras-Targeting Human Acyl Protein Thioesterases Based on Substrate Similarity Design. *Angew Chem Int Ed Engl.* 2011 Sep. 10;50(42):9832-7.
51. Grecco HE, Schmick M, Bastiaens PI. Signaling from the living plasma membrane. *Cell.* 2011 Mar 18;144(6):897-909. Review.
52. Roukos V, Kinkhabwala A, Colombelli J, Kotsantis P, Taraviras S, Nishitani H, Stelzer E, Bastiaens P, Lygerou Z. Dynamic recruitment of licensing factor Cdt1 to sites of DNA damage. *J Cell Sci.* 2011 Feb 1;124(Pt 3):422-34.

53. Nievergall E, Janes PW, Stegmayer C, Vail ME, Haj FG, Teng SW, Neel BG, Bastiaens PI, Lackmann M. PTP1B regulates Eph receptor function and trafficking. *J Cell Biol.* 2010 Dec 13;191(6):1189-203.
54. Lorentzen A, Kinkhabwala A, Rocks O, Vartak N, Bastiaens PI. Regulation of Ras localization by acylation enables a mode of intracellular signal propagation. *Sci Signal.* 2010 Sep 21;3(140):ra68.
55. Vartak N, Bastiaens P. Spatial cycles in G-protein crowd control. *EMBO J.* 2010 Aug 18;29(16):2689-99. Review.
56. Dehmelt L, Bastiaens PI. Spatial organization of intracellular communication: insights from imaging. *Nat Rev Mol Cell Biol.* 2010 Jun;11(6):440-52.
57. Grecco HE, Roda-Navarro P, Girod A, Hou J, Frahm T, Truxius DC, Pepperkok R, Squire A, Bastiaens PI. In situ analysis of tyrosine phosphorylation networks by FLIM on cell arrays. *Nat Methods.* 2010 Jun;7(6):467-72.
58. Dekker FJ, Rocks O, Vartak N, Menninger S, Hedberg C, Balamurugan R, Wetzel S, Renner S, Gerauer M, Schölermann B, Rusch M, Kramer JW, Rauh D, Coates GW, Brunsveld L, Bastiaens PI, Waldmann H. Small-molecule inhibition of APT1 affects Ras localization and signaling. *Nat Chem Biol.* 2010 Jun;6(6):449-56.
59. Rocks O, Gerauer M, Vartak N, Koch S, Huang ZP, Pechlivanis M, Kuhlmann J, Brunsveld L, Chandra A, Ellinger B, Waldmann H, Bastiaens PI. The palmitoylation machinery is a spatially organizing system for peripheral membrane proteins. *Cell.* 2010 Apr 30;141(3):458-71.
60. Zamir E, Lommerse PH, Kinkhabwala A, Grecco HE, Bastiaens PI. Fluorescence fluctuations of quantum-dot sensors capture intracellular protein interaction dynamics. *Nat Methods.* 2010 Apr;7(4):295-8.
61. Kinkhabwala A, Bastiaens PI. Spatial aspects of intracellular information processing. *Curr Opin Genet Dev.* 2010 Feb;20(1):31-40.
62. Janes PW, Wimmer-Kleikamp SH, Frangakis AS, Treble K, Griesshaber B, Sabet O, Grabenbauer M, Ting AY, Saftig P, Bastiaens PI, Lackmann M. Cytoplasmic relaxation of active Eph controls ephrin shedding by ADAM10. *PLoS Biol.* 2009 Oct;7(10):e1000215.
63. Bellou S, Hink MA, Bagli E, Panopoulou E, Bastiaens PI, Murphy C, Fotsis T. VEGF autoregulates its proliferative and migratory ERK1/2 and p38 cascades by enhancing the expression of DUSP1 and DUSP5 phosphatases in endothelial cells. *Am J Physiol Cell Physiol.* 2009 Dec;297(6):C1477-89.
64. Keese M, Yagublu V, Schwenke K, Post S, Bastiaens P. Fluorescence lifetime imaging microscopy of chemotherapy-induced apoptosis resistance in a syngenic mouse tumor model. *Int J Cancer.* 2010 Jan 1;126(1):104-13.
65. Bastiaens P. Systems biology: When it is time to die. *Nature.* 2009 May 21;459(7245):334-5.
66. Vilar M, Charalampopoulos I, Kenchappa RS, Simi A, Karaca E, Reversi A, Choi S, Bothwell M, Mingarro I, Friedman WJ, Schiavo G, Bastiaens PI, Verveer PJ, Carter BD, Ibanez CF. Activation of the p75 neurotrophin receptor through conformational rearrangement of disulphide-linked receptor dimers. *Neuron.* 2009 Apr 16;62(1):72-83.
67. Zamir E, Bastiaens PI. Reverse engineering intracellular biochemical networks. *Nat Chem Biol.* 2008 Nov;4(11):643-7.
68. Verveer PJ, Bastiaens PI. Quantitative microscopy and systems biology: seeing the whole picture. *Histochem Cell Biol.* 2008 Nov;130(5):833-43.

69. Wouters FS, Bastiaens PI. Imaging protein-protein interactions by fluorescence resonance energy transfer (FRET) microscopy. *Curr Protoc Protein Sci.* 2001 May;Chapter 19:Unit19.5.
70. Wouters FS, Bastiaens PI. Imaging protein-protein interactions by Fluorescence Resonance Energy Transfer (FRET) microscopy. *Curr Protoc Neurosci.* 2006 Feb;Chapter 5:Unit 5.22.
71. Wouters FS, Bastiaens PI. Imaging protein-protein interactions by fluorescence resonance energy transfer (FRET) microscopy. *Curr Protoc Cell Biol.* 2001 May;Chapter 17:Unit 17.1.
72. Offterdinger M, Bastiaens PI. Prolonged EGFR signaling by ERBB2-mediated sequestration at the plasma membrane. *Traffic.* 2008 Jan;9(1):147-55.
73. Maeder CI, Hink MA, Kinkhabwala A, Mayr R, Bastiaens PI, Knop M. Spatial regulation of Fus3 MAP kinase activity through a reaction-diffusion mechanism in yeast pheromone signalling. *Nat Cell Biol.* 2007 Nov;9(11):1319-26.
74. Xouri G, Dimaki M, Bastiaens PI, Lygerou Z. Cdt1 interactions in the licensing process: a model for dynamic spatiotemporal control of licensing. *Cell Cycle.* 2007 Jul 1;6(13):1549-52.
75. Bastiaens P. Pimp my cell. *Mol Syst Biol.* 2007;3:120.
76. Keese M, Offterdinger M, Tischer C, Girod A, Lommerse PH, Yagublu V, Magdeburg R, Bastiaens PI. Quantitative imaging of apoptosis commitment in colorectal tumor cells. *Differentiation.* 2007 Nov;75(9):809-18.
77. Xouri G, Squire A, Dimaki M, Geverts B, Verveer PJ, Taraviras S, Nishitani H, Houtsmuller AB, Bastiaens PI, Lygerou Z. Cdt1 associates dynamically with chromatin throughout G1 and recruits Geminin onto chromatin. *EMBO J.* 2007 Mar 7;26(5):1303-14.
78. Santos SD, Verveer PJ, Bastiaens PI. Growth factor-induced MAPK network topology shapes Erk response determining PC-12 cell fate. *Nat Cell Biol.* 2007 Mar;9(3):324-30.
79. Niethammer P, Kronja I, Kandels-Lewis S, Rybina S, Bastiaens P, Karsenti E. Discrete states of a protein interaction network govern interphase and mitotic microtubule dynamics. *PLoS Biol.* 2007 Feb;5(2):e29.
80. Yudushkin IA, Schleifenbaum A, Kinkhabwala A, Neel BG, Schultz C, Bastiaens PI. Live-cell imaging of enzyme-substrate interaction reveals spatial regulation of PTP1B. *Science.* 2007 Jan 5;315(5808):115-9.
81. Rocks O, Peyker A, Bastiaens PI. Spatio-temporal segregation of Ras signals: one ship, three anchors, many harbors. *Curr Opin Cell Biol.* 2006 Aug;18(4):351-7.
82. Bastiaens P, Caudron M, Niethammer P, Karsenti E. Gradients in the self-organization of the mitotic spindle. *Trends Cell Biol.* 2006 Mar;16(3):125-34.
83. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. Imaging protein interactions by FRET microscopy: cell preparation for FRET analysis. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.prot4646. doi: 10.1101/pdb.prot4646. PubMed PMID: 22485994.
84. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. Imaging protein interactions by FRET microscopy: labeling proteins with fluorescent dyes. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.prot4645. doi: 10.1101/pdb.prot4645. PubMed PMID: 22485993.

85. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. Imaging protein interactions by FRET microscopy: FLIM measurements. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.prot4599. doi: 10.1101/pdb.prot4599. PubMed PMID: 22485986.
86. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. Imaging protein interactions by FRET microscopy: FRET measurements by acceptor photobleaching. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.prot4598. doi: 10.1101/pdb.prot4598. PubMed PMID: 22485985.
87. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. Imaging protein interactions by FRET microscopy: FRET measurements by sensitized emission. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.prot4597. doi: 10.1101/pdb.prot4597. PubMed PMID: 22485984.
88. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. FLIM measurements and frequency domain FLIM data analysis. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.ip17. doi: 10.1101/pdb.ip17. PubMed PMID: 22485975.
89. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. An experimental setup for frequency domain FLIM. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.ip16. doi: 10.1101/pdb.ip16. PubMed PMID: 22485974.
90. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. Measuring FRET by acceptor photobleaching. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.ip15. doi: 10.1101/pdb.ip15. PubMed PMID: 22485973.
91. Verveer PJ, Rocks O, Harpur AG, Bastiaens PI. Measuring FRET by sensitized emission. *CSH Protoc.* 2006 Nov 1;2006(6). pii: pdb.ip14. doi: 10.1101/pdb.ip14. PubMed PMID: 22485972.
92. Caudron M, Bunt G, Bastiaens P, Karsenti E. Spatial coordination of spindle assembly by chromosome-mediated signaling gradients. *Science.* 2005 Aug 26;309(5739):1373-6.
93. Cremazy FG, Manders EM, Bastiaens PI, Kramer G, Hager GL, van Munster EB, Verschure PJ, Gadella TJ Jr, van Driel R. Imaging in situ protein-DNA interactions in the cell nucleus using FRET-FLIM. *Exp Cell Res.* 2005 Oct 1;309(2):390-6.
94. Keese M, Magdeburg RJ, Herzog T, Hasenberg T, Offterdinger M, Pepperkok R, Sturm JW, Bastiaens PI. Imaging epidermal growth factor receptor phosphorylation in human colorectal cancer cells and human tissues. *J Biol Chem.* 2005 Jul 29;280(30):27826-31.
95. Rocks O, Peyker A, Kahms M, Verveer PJ, Koerner C, Lumbierres M, Kuhlmann J, Waldmann H, Wittinghofer A, Bastiaens PI. An acylation cycle regulates localization and activity of palmitoylated Ras isoforms. *Science.* 2005 Mar 18;307(5716):1746-52.
96. Peyker A, Rocks O, Bastiaens PI. Imaging activation of two Ras isoforms simultaneously in a single cell. *Chembiochem.* 2005 Jan;6(1):78-85.
97. Erfle H, Simpson JC, Bastiaens PI, Pepperkok R. siRNA cell arrays for high-content screening microscopy. *Biotechniques.* 2004 Sep;37(3):454-8, 460, 462.
98. Offterdinger M, Georget V, Girod A, Bastiaens PI. Imaging phosphorylation dynamics of the epidermal growth factor receptor. *J Biol Chem.* 2004 Aug 27;279(35):36972-81.
99. Squire A, Verveer PJ, Rocks O, Bastiaens PI. Red-edge anisotropy microscopy enables dynamic imaging of homo-FRET between green fluorescent proteins in cells. *J Struct Biol.* 2004 Jul;147(1):62-9.

100. Niethammer P, Bastiaens P, Karsenti E. Stathmin-tubulin interaction gradients in motile and mitotic cells. *Science*. 2004 Mar 19;303(5665):1862-6.
101. Wimmer-Kleikamp SH, Janes PW, Squire A, Bastiaens PI, Lackmann M. Recruitment of Eph receptors into signaling clusters does not require ephrin contact. *J Cell Biol*. 2004 Mar 1;164(5):661-6.
102. Tischer C, Bastiaens PI. Lateral phosphorylation propagation: an aspect of feedback signalling? *Nat Rev Mol Cell Biol*. 2003 Dec;4(12):971-4. Review.